



TAMPEREEN TEKNILLINEN YLIOPISTO

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SUCCESS FACTORS IN FASHION INDUSTRY

Master of Science Thesis

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ABSTRACT

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This study evaluates the different business practices -adopted by the fashion industry players – to determine the success factors that ensure the optimization of the available resources. Success factors of “Fashion value chain” were explored thoroughly depending upon the financial information of 52 European\US clothing companies. After analysing the information gathered, for these business model categories, it was concluded that fast fashion based models were quite successful in terms of efficiently utilizing their resources. This conclusion is aided through the recognised success measuring (financial ratios) tools.

Results of the studies were corroborated - to facilitate the understood/expected importance - of these key factors in today's consumer driven fashion industry. Concluding from the data analysis Brand Retailers were found to be the most successful business model. Each model studied, exhibited distinct features in their own domains depending upon the core competences, however, most optimum results were harnessed using responsive strategies & with incorporation of agility within the value networks. Multi Brand Retailers were configured to the least successful model in the current fashion value chain scenario.

PREFACE

This writing is qualified as my Master's Degree Thesis, chosen from my major studies, and as suggested from the title it takes into perspective the success factors driving the fashion apparel industry. Fashion industry is typified as a buyer's driven industry, in retrospect to the large manufacturers whom affected the customer's perception in terms of trends.

In modern day, fashion industry customers are characterized as the source for all the trend generation as it is, at the end, their perception -about what is trendy or fashionable- that creates value for the upstream value chain players. This in effect magnified the roles of retailing and downstream value chain activities. Considering which, all the major fashion players that are operating in modern industry have realized the importance of customers demand and are applying themselves in the manner where they can come up with a differentiation in the ways that address or assess the customers demand, reliably & responsively.

Keeping this differentiation factor in mind this study focuses on the major fashion players in existing competitive fashion world and evaluate their strategies and how they help them achieve better returns on the capital employed. The chosen companies have been first classified into specific business models adopted today and analyzed by gathering their data (financial) from their annual reports. The objective was to underpin the main aspects that contribute towards the creation of competence for these players.

This effort by no means was possible without the guidance and support of people, around me. It is under their influence that I have managed to jot down my efforts and inclinations. I would really like to acknowledge the role of my Supervisors, especially, Milka Mustonen for her un-relenting supporting role and facilitating me throughout this work with enduring patience & Heikki Mattila for giving me this opportunity to work on this topic. And of course my family, who prayed for my success, backed me in all situations. I am also really thankful to all my friends and well-wishers who at each juncture during this thesis helped me in completing this work.

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1 TERMS

CM	Cut and manufacturing
CMT	Cut, Manufacturing and Trimming
CPFR	Collaborative Planning Forecasting & Replenishment
ECR	Efficient Consumer Response
POS	Point of Sales
SFM	Sales Forecasting Management
QR	Quick Response
VMI	Vendor Managed Inventory
SCM	Supply Chain Management
BR	Branded Retailer
MBR	Multi Brand Retailer
LB	Luxury Brand (Retailer)
BM	Branded Marketer
DC	Distribution Centre
A/E	Asset to Equity Ratio
D/A	Debt to Asset Ratio
D/E	Debt to Equity Ratio
GMROI	Gross Margin Return on Inventories
ROA	Return on Assets
ROE	Return on Equity
ROCE	Return on Capital Employed
GM	Gross (profit) Margin
EBIT	Profit before Taxes and Interests
EVA	Economic Value Added
SKU	Stock Keeping Units
JIT	Just in time
ERP	Enterprise Resource Planning
CRM	Customer Relationship Management
TQM	Total Quality Management
KPI	Key Performance Indicators
CSR	Corporate Social Responsibility

2 FASHION INDUSTRY

2.1 Fashion

Interpretation of word fashion can be elusive, mysterious or even undefinable. Fashion is a concept with in-numerable implications allowing people to interpret it by choosing a specific meaning reflecting their judgement and taste. Interpretation varies from it being glamorous and exciting, out of the world, creative, a viable business opportunity, and so on.

Conversely, fashion can be defined with specific concrete meanings, fashion means acceptance, it is a business that requires innovation, and it is reflective of people and their environment. It means imitation and at the same time self-expression. [1]

During its first stage of development, pre 1900 era, industry thrived on Technical Know-how, termed as *Production phase*. By early 1900 fashion (clothing) industry further honed on the sophisticated production techniques, producing huge quantities of ready to wear. This era relied largely on fulfilling the needs of the increasing population and in addition to production techniques distribution of the merchandise was looked after, known as *Distribution Phase*. Manufacturers were concerned to provide the consumers with the cheap and efficient clothing, moreover, this era was characterised by the dictatorship of the manufacturers. Consumers were restricted through strict guidelines set by the, then, designers, and other fashion industry authorities. This dictatorship then eventually ended in 1970's and ensued into a fashion industry catering to the consumer's varying needs and wants. [1]

The response to this criticism was rationalised through the human psychic: as people get bored easily borne out of the insatiable urge for newness and change. Moreover this created opportunity for the industry to create employment and generate revenues, justifying its economic viability, as well. In order to meet these challenges fashion industry reacted with consistently updating and altering the offerings to the consumers, this constant change led to the criticism charging fashion as Economic Waste. Vance Packard, consumer advocate and author, alleged the fashion industry of 'Planned Obsolescence'-deliberately outmoding the existing product with new products. [1]

2.1.1 Fashion Market

Today's fashion market is highly competitive and demand driven. This has forced companies to refresh their product continuously, to cater the trends of varying needs of consumers. Christopher et al. [3] explains fashion market encompassing the following characteristics:

Short life cycles: the product is often *here today gone tomorrow*, designed to capture the mood of the moment, implying that the selling time is likely to be very short and seasonal, measured in months or even weeks.

High volatility: demand for these products is highly unpredictable or unstable, relying on factors, such as weather, role models, icons, etc.

Low predictability: due to the volatile demands it is extremely difficult to forecast with any accuracy even total demand within a period, let alone week-by-week or item-by-item demand.

High impulse purchasing: is regulated by the confrontation of the buyer with the product in store. In other words, the shopper when interacts with the product is stimulated to buy it, for that reason "availability" of that particular product matters.

The combined effects of these aspects of fashion market pose serious challenges in the respective fields of logistics and supply chain management.

2.1.2 Fast Fashion

Fast fashion is characterised by instability of forms and constant changes, and by relatively short periods of duration of styles and contemporary dressing. It's a business strategy known to reduce the reliance of traditional forecasting, buying cycles and lead-times just by getting new fashion product into stores, in order to satisfy the- insatiably varying- demands.

Previously fashion companies have catered its customers through forecasting fashion and future trends rather than relying on real time data depending upon the needs and wants of the consumers. In the typical fashion markets, forecast driven supply chains are not considered as the success factor in terms of responding to the highly volatile demands, as competition in the fashion industry shifted from price and quality towards a deeper focus on timing such that designs can be quickly imitated and production only continued for successful items. [3] This indicates responsiveness could be an effective substitute for an inability to accurately predict future trends (Richardson, 1996). Christopher (1992) reinforces these claims, as the risks associated with forecasting increase

with lead-time length and defines lead time as the total amount of time between a customer order and its delivery. [6]

Major drawback to the forecasting strategy was the forecasting error which resulted in Mark-downs and Lost Sales, not only that, but also the cost of the inventory. In response fast fashion retailers have compressed their lead times as such to satisfy the consumer demand by having the right product at the right time. When the retailers refresh their stock so often, markdowns are indirectly reduced; whereas if stock is refreshed each season, the previous season's stock would usually have to be discounted (Anson, 2002). Reduced inventory and lowering of the markdowns for the excessive products are the aspects retailers look for to be more productive (Richardson, 1996). Zara is a specialist fashion chain and an important example of a fast fashion retailer, with rapid stock turnaround and vertical integration. In 2005, The Economist touted Zara as widely acclaimed leader in fast fashion. However, contributing to Zara's success is its focus on a limited range. [8]

Timing is the one aspect fashion retailers look to thrive on, with a perspective to serve the consumers expectant of change. Distance is the key –goods from China can have a shipping time of 22 days, compared to five days from Turkey, therefore, forcing retailers to switch production to Eastern Europe, Turkey and India, in race with fast fashion specialists, such as Zara, who are able to push the latest trends quickly by sourcing closer to home (Financial Times, 2005) [8]

Implications of the fast fashion also introduced the ‘planned obsolescence’ as a winner strategy achieved through the increase in number of seasons, reducing the development cycle, and through efficient transportation and delivery practices, therefore, depending upon time as a factor for enhancing competitiveness and differentiation. In response to the pace of fast fashion, companies in the Far East are becoming increasingly adept at moving from the manufacture of commodity products to incorporating design and branding. [8]

2.2 Consumers

In its beginning, fashion was accepted mostly by the wealthier classes, but in time, it gradually became available to general population, becoming an integral part of the ‘consumer mentality’. Since then, fashion has been the voice of an individual separating him from the crowd throughout the development stages of nineteenth and twentieth century metropolis. Modernity creates fragmentation and dislocation. [7] It creates the vision of totalitarian (Muller, 2000) societies that are peopled with identical looks, thus identifying an individual in terms of psychic and social terms. Researchers have argued that fashion behaviours are deeply rooted in emotional and psychological motivations. To-

day's clothing provides both psychological and sociological insight into people and their world. [2]

Today's consumer motivation for shopping is more hedonic in contrast to the utilitarian. In utilitarianism, which is a rational view, an individual is viewed as a problem solver. Motivation for shopping can be task-oriented, rational, and cognitive, therefore purchasing is characterised as rationally and efficiently. Whereas, Hedonism is motivated by the desire to have fun and be playful, implying on the experiential values of shopping that includes fantasy, arousal, sensory stimulation, enjoyment, pleasure, curiosity, and escapism. (Hirschman and Holbrooke, 1982) [4]

Fashion industry is mapped out more than at any time in the history. Influences from demographic structures, concerns for the environment and further adoption of new technologies are all inevitable. [4] Fashion originates from the societal needs, largely governed through the socio-political and economic forces, the historical context, the innovation of science and technology and other special events. All these combine to form social trends. Since the societies consist of number of sub-societies, sub-cultures, patterns of behaviours, and attitudes- and practices of these entities as collective are known as life styles. These variables provide the businessmen with the opportunities to cater different groups of people.

2.2.1 Model of Adoption

Robertson's (1971) [5] provides some insight about the response to these emerging trends, as shown in Figure 1, model of adoption process in three stages: cognitive, attitudinal, and behavioural. This model implies *cognitive* and *behavioural* attributes relating to interest and involvement respectively. And positive and negative reaction takes account of the individual's *attitude*.

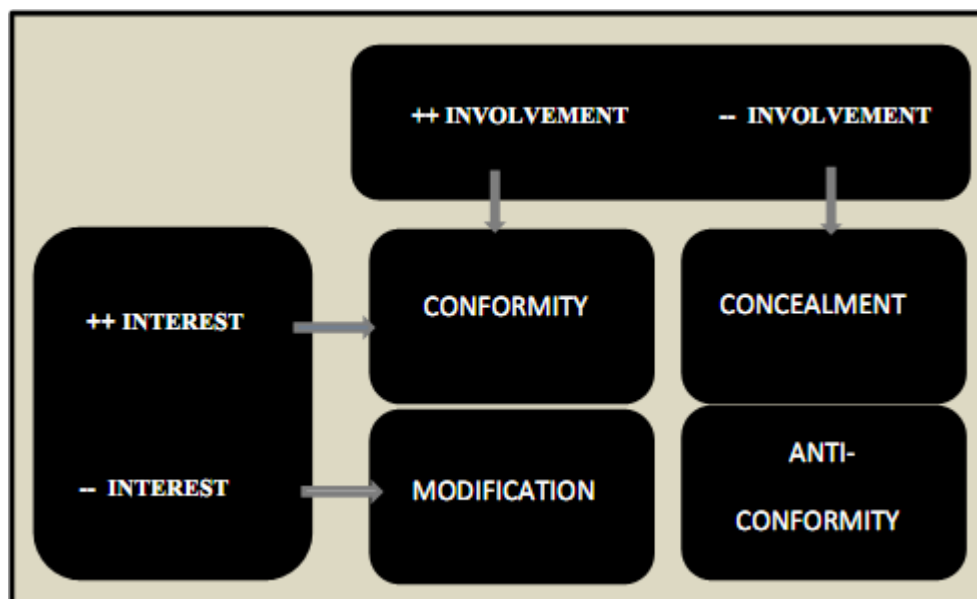


Figure 1. Cross Relationship, Model of Adoption. [5]

A Chalachatpinyo [5] concludes the interactions as four possible events. As discussed below:

Positive interest and positive involvement: This situation leads to a change. People are able to accept and then pursue a change eagerly. This kind of reaction can be classified as Conformity- meaning dressing according to the dominant social norms.

Negative interest and negative involvement: This category has neither interest nor involvement to adapt to the recent trends or situations. People of this viewpoint behave and express themselves as upstream to resist the evolving situations. This classifies them as anti-conformity- dressing as suggesting a rebellion to the change.

Positive interest and negative involvement: Well aware of changes, this class, however, do not want to get involved. Off course, conservative in their styles these people manages to ignore the happenings and change around them and only allow these changes permeates to their life styles imperceptibly. This is termed as Concealment- like a chameleon, dressed in mode to, fit in anywhere.

Negative interest and Positive Involvement: These people don't vie for the new situations however, still manages to acclimatise accordingly. Mostly in order to keep and internal social balance in their lives, their adoption conforms to the new social trends but is different from it, termed as Modification- adapts dress: new way of dynamic balance.

2.2.2 Fast Fashion consumerism

Consumers today are far more fashion savvy and demanding than in past (The Economist, 2005). Consumers are smart & intelligent, powerful, individualistic, highly demanding, have high degree of expectations, have a disposable attitude and strong values and principle. Consumers differ in their level of aspirations and also in relationship they see between clothing and the achievement of social mobility. [2]

These fashion conscious segments of the consumers are likely to be volatile, rapidly changing and difficult to predict. Alarmingly, for the conventional fashion retailers, the fast fashion companies gains the grounds much faster than anticipated. According to TNS Fashion Trak, in six months from September 2004 until March 2005, sales of the fast fashion clothing increased by 11% compared to the 2% for overall clothing retail. (Marketing, 2005) [6]

2.3 Supply Chain Management

Supply Chain management is the strategic coordination of business functions within a business organization and throughout its supply chain for the purpose of integrating supply and demand management. With rapid accession of technology supply chains have been evolving rapidly, too, into what is known as Supply Chain Network. Supply chain network is a dynamic & integrated system in which all firms are integrated to increase the value of the chain [35]. It is a trusted motif that competition today is not among individual businesses but among their networks. The winner is the company with better network. Successful business operations progress on getting the right amount of the right product to the right market at the right time in most economical ways. SCM is the footsteps to achieve it. [27]

2.3.1 Fashion Supply Chain

A generalised view for the fashion supply chain can be the flow of goods from the manufacturer to the retailer, supported by the flow of information between each supply chain participant. Operations within the supply chain are triggered by consumers demanding goods from retailers. Retailers face a number of options in managing their network and their choices of delivery channel will affect every part of supply chain. [10]

The main drivers of the fashion industry - comprising of Global competition- are faster product development, flexible sourcing strategy, and a great variety of products have contributed to the increase of uncertainty in the market. Sales forecasting brings along the risk of growing stocks and simultaneously the stock-out, in addition to losing the customer loyalty. The need to provide customer with high service levels and maintaining low cost for attaining the customer loyalty has provided a reason for the retail trade to re-engineer their supply chains.

If the supply doesn't meet the demands the cost attached to it has to be borne out by every participant of the supply chain that including the customers too, as mismatch costs are then applied into the prices. Fisher, Hammond, Obermeyer and Raman defend the responsive nature of the supply chain as it can help the companies to prevent the customers from paying higher prices for their inaccurate forecasts. Managers need to think differently about what they do and the purpose of the organization and organizational networks in satisfying demand through effective (strategic) and efficient (operational) supply chain structures, relationships and strategies. [11] The success of how to make the supply chain responsive includes developing the capabilities to manage: Value, Volume, Volatility, Velocity, Variety, Visibility and Virtuality. [11]

Increasing competition will change the fashion supply chains in aspects such as [9]:

- Short lead times
- Low or no inventories
- Continuous design & Manufacturing
- Demand Driven
- Fast to Market

As stated above, matching supply with the demand is challenging but what makes it more vulnerable to achieve is the environment where supply is planned well in advance of the actual occurrence of demand [39]. Order placement is critical scenario as commitment to these orders can result in either supply falling short of actual demand entailing lost opportunity for sales or supply going in excess of the actual demand resulting in increased inventory load decreasing salvage value [39]. Both the scenarios have daunting impacts on the outcomes of supply chain management, however, these situations can be neutralised with a particular focus on supply chain structure, relationships and enabling activities supporting postponement strategy across the supply chain.

2.3.2 Postponement

Postponement is one of tools in modern fashion SCM which strongly relies on the strategy of reducing the production cycle times and time to market to utilise the downstream demand on real time basis. This requires delaying the product customization activity till more data is available inclined to the market demand. Zara have adopted this strategy efficiently in managing its demand as about one half of the fabric purchased was gray (undyed) to facilitate the in-season updating with maximum flexibility. [26]

At a time where customer, based on the demand pattern, places an order is termed as order penetration point. This order divides the supply chain in two fragment one relying on the forecast, without information regarding final demand, and the other catering to the actual data based on customer demand. Therefore this strategy encompasses the products ranging from standardization (zero postponement) to the customization (full postponement). Depending upon the nature of product and downstream demand impacts these strategies pervades through product development, purchasing, manufacturing and logistics postponement. [28]

Product development postponement – it deals with the products with higher levels of volatile environments, higher level of consumer demand uncertainty, technological developments and government regulations. Products with long delivery times and with integration of advance customization (resulting in increased delivery times) generally deemed suitable for product development postponement. This strategy involves extreme form of customization with regards to processes - such as: product design, development and production- being delayed until the availability of downstream demand.

Purchasing Postponement – includes the postponement on purchase of raw material until the availability of the customer demand. The raw material that qualifies for this postponement must be exhibiting high obsolescence cost and tags a high value in terms of total product cost or engages higher amounts of working capital. In addition, uncertain demand for the product is the basic pre-requisite of this postponement strategy as well. [28]

Manufacturing Postponement – is of critical importance allowing companies to function without holding finished good inventory while maintaining the inventories at their pre-customised form. By applying postponement strategy at this point of time till the demand becomes visible businesses saves them from carrying the risks of higher cost added inventory in its finished form and also permits them to utilise the raw state inventory to be utilised for wide usage variation (Lambert 2007). [28]

Zara, a leading fashion apparel retailer, employs the manufacturing postponement strategy to reduce the lead times. The main focus of their forecasts is the type and amount of fabric they need for a particular season. By purchasing 50% of the un-dyed fabric they help reduce the risk of higher attached costs as well as the chances of forecast errors. This gives Zara the leverage in speed and flexibility to address the demands when they are sorted at the downstream end.

Logistics Postponement – focuses on the delayed movement of good or products with increased product variety and uncertain demand making them economically vulnerable to be available at their minimum levels of stock keeping units (SKU's) at all locations. Therefore the movement is controlled through the central distribution centre to optimally cater the demand fulfilment for the final shipment. Logistics postponement strategy applies to the products with higher inventory cost and relatively lower transportation costs. [28]

2.3.3 Integration in Supply Chain

Supply chain management is an alliance that is focused on new types of relationship in supply chain: blurring of the organizational lines (Manager, KSA). Stevenson (1989) recognised the importance of moving from the functional silos toward an integrated supply chain.

Apparel industry being buyer driven makes a strong case of making the supply chain respond to customer needs and demands. This aspect has led to the integration of supply chains where marketing and supply chain management are collaborated. This collaboration affects closer ties between the suppliers and retailers, and thus resulting in quicker and more efficient transfer of information and material flows. [9]

Generally, fabric manufacturer designs its own fabrics from which Garment manufacturer selects a design fulfilling its need and later in the end retailer selects for its garments. Abend (1997) suggests all these three players have made their own independent forecasts and at the end we have to face the consequences of three different forecasts.

How the organizations shift from their functional attributes towards an integrated organization has been illustrated in the Figure 2, starting as base line organization in the first stage functions integrates in order to serve a common interest of serving the customers. [11] As can be seen in the figure with each stage up gradation the bond become stronger, indicating more reliability and opacity in terms of sharing material and information flow. In the final stage external integration occurs unifying the organizational internal supply chain, suppliers and customers. Enhancing the flow of materials eradicating the impediments, causing the supply chain to be more cost and time effective, with adding to the value for the customer. Managing upstream and downstream relationships with suppliers and customers allows superior customer value to be delivered at a lower total supply chain cost. (Christopher, 1992)

This integration can be translated by the actions where strong retail chains are vying for better control over their supply chain in a same manner as manufacturers are looking at retailing. This insight has opened the windows for alliances between the firms both horizontally and vertically as a way of maintaining the competitiveness. Some manufacturers opening their own retail stores or allying with retailers in a same manner as retailers are partnering with manufacturers. [9]

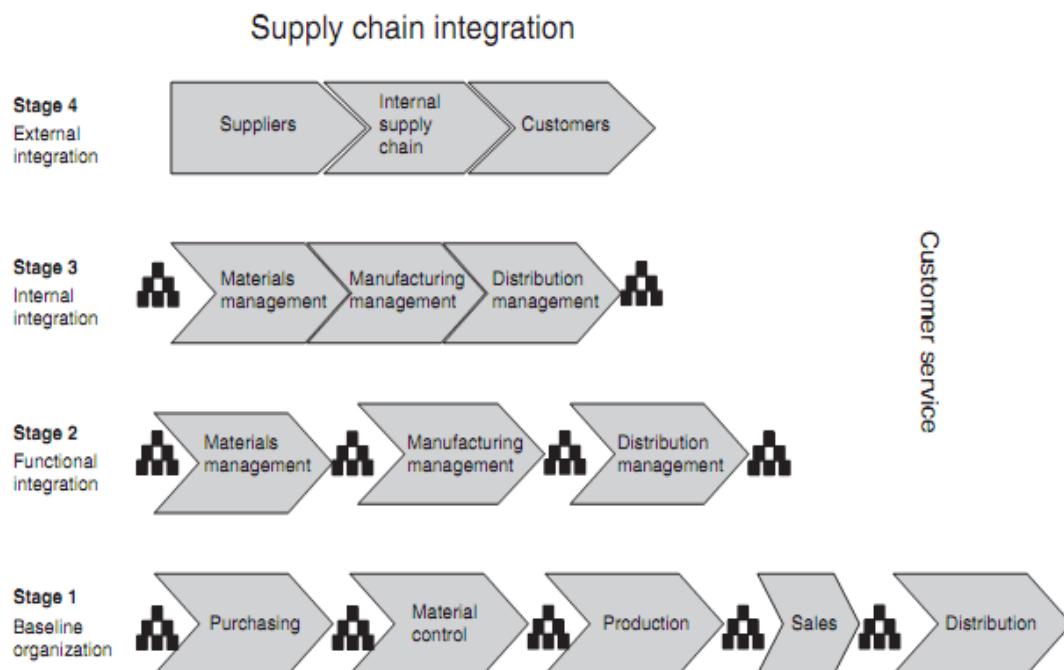


Figure 2. Supply chain Integration [11]

2.3.4 Integration Strategies

The 21st century is characterised by changes; with proliferation of globalization & technological changes with dramatic fall in information communication costs -comprising the major component of transaction cost, contributed to development of supply chain networks. This scenario helped in emergence of strategies for new business paradigms that leads companies to competitive advantage. Just in Time (JIT), Supply Chain Management (SCM), Total Quality Management (TQM), Enterprise Resource planning (ERP) and Customer Relationship management were the pillars of integration enabling companies to improve production processes, reduce costs & successfully compete in varying business environments. [35]

Focusing on the fashion industry and integration in fashion supply chain following strategies has been deployed to good effects, till date.

Quick Response (QR) is a merchandising strategy used by the apparel manufacturers and retailers and their raw material manufacturers for shortening the pipeline from raw material to the checkout counters at the retail stores (Knill, 1997) [9] introduced into the textile industry in 1980's, by Kurt Salmon Associates, with an objective of reducing inventory holding costs, postponing the commitment of resources in manufacturer until demand forecast becomes visible and having flexible manufacturing systems, that can respond. QR is a pull system and consolidates on consumer demand related the information retrieved from all players in the supply chain, which is possible through the below mentioned technologies: [9]

- Bar code on all products sold in the retail outlets
- Use of Bar code scanner at POS in retail outlets
- EDI, Electronic Transmission of data from the retailer to the manufacturers

The longest part of the fashion supply chain is taken up in design, sampling, fabric sourcing and procurement, whereas shortest part is manufacturing and retailing. Therefore, if the retailers can eliminate time and risk by producing closer to the selling period they can predict demand better and avoid overstock and under stock.

Not only this, QR requires a commitment towards accession of technology by both the vendor and customer for efficient communication of marketing information. Technologies such as EDI, POS, etc. helps in bridging the gap throughout the pipeline by keeping a count of SKU's sold and communicating the amount for the replenishment of stock to the suppliers. Zara and Benetton are the two success stories applying these practices into their businesses, successfully.

ECR (Efficient Consumer Response) is an extension of QR, differing in the aspect that it goes further in joint sharing of supply chain functions in order to maximise the consumer satisfaction (Knill,1997) [9]. Also in case of QR for inventory management QR strategy ensures larger breadth of merchandise to maximise customer satisfaction. However, in ECR the goal is to reduce inventories to a minimum level without sacrificing customer satisfaction [9]. ECR integrates the supply chain management with demand management to create smooth flows of product through the supply chain to satisfy consumer demand efficiently. ECR focuses on retail organization and its supplier whereas QR consolidates on manufacturing capabilities and efficiency to deliver in a responsive manner.

ECR stands on the following four factors:

- Store assortment
- Promotion
- Replenishment
- Innovation (new products)

VMI (Vendor Managed Inventories) is a traditional unification of the retailers and suppliers, where both are independent commodities. Suppliers are generally managing the inventory on customer's behalf and refill the shelves on demands. King (1995) & Hunter (1997) describe it as some season's goods are delivered at the start of the season and replenishment orders are usually made weekly on the basis of re-estimation of demand. POS information is not shared with the supplier and supplier runs the risk of over producing the goods as he has to forecast on his own. This strategy is generally implied into the supply chains where the retailer consolidates the major activities in the supply chain. VMI is best suited to basic apparel, such as hosiery, etc. where the obsolescence is a far cry. [9]

Vertical Integration, although different in scope to SCM - in which a strategic coordination of independent companies takes place for the purpose of integrating supply and demand management- which deals with the same ownership throughout the supply chain. Zara is one of the most notable examples of vertical integration.

CPFR (Collaborative Planning, Forecasting and Replenishment) reflects the business processes where the two partners (manufacturer and retailer) agrees upon the mutual objectives & measures, joint development of sales and operational plans ,and most importantly, collaborate to generate & update sales forecasts & replenishment plans. This specifically implies to the new product lines or promotional products rather than the regular line of products. The information shared is POS sales data and promotion plans. This concepts builds on the internet based platform where the information is shared between the supplier and buyer and to optimise the collaboration in store ordering. [23]

2.4 Classification of Companies

In the wake of post-industrial era clothing industry of developed countries reshaped itself, relying solely on the advents of high tech value adding technical textiles. Although the companies are still operational and striving but the production (garment) has been outsourced to lower cost regions. With the changing trends in the clothing industry, driven by change and innovation, these companies have started to relocate production to North Europe and to places which allows for the responsive supply for the clothing.

Value is one factor that increases when more risk is attached to it. Value added activities are the mostly sought after in present day business as companies try to improve on their profitability. Generally it is understood that the product is more valued when it's nearing the consumers in its supply chain, as the premium on it increases as well as the risk of accommodating the complex and uncertain demands. Therefore, retailers have the freedom to price the object according to the risk associated with the acceptance of a particular style of product, as when the product is closer to consumer it means longer lead times and increasing risks. The textile industry has at least five players in apparel supply chain as shown in figure 3.

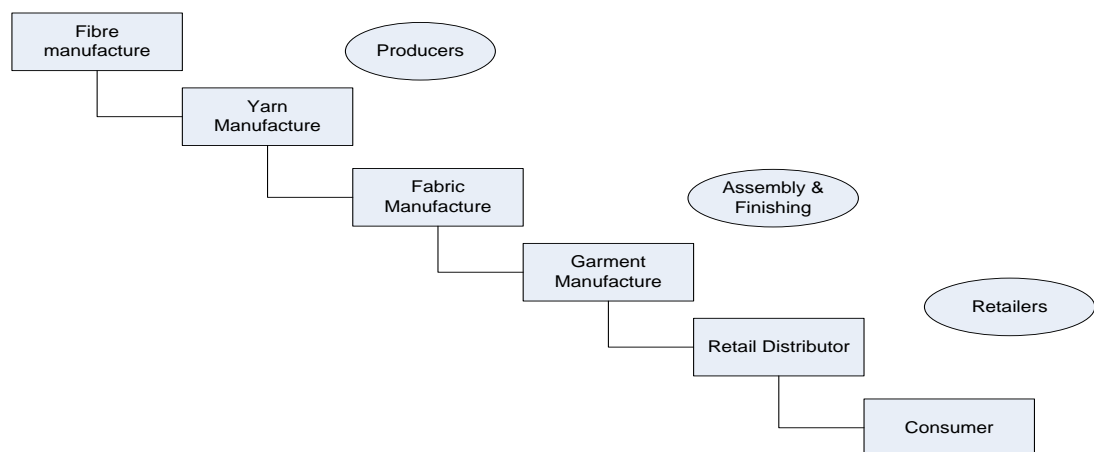


Figure 3. Players in Apparel supply chain. [34]

To examine this further, companies are categorised, as follows:

2.4.1 Producers

These are the producers of the basic raw materials used in the manufacturing of high end fashion articles. As can be seen from the figure above the value added impact of these players in the textile companies is of least value and solely relies on the economy of scale to earn return on their investments. Production houses are mostly located in the Far East production zones. These producers include the products such as fibers, fabric, chemicals, etc. They can be further classified into [9]

- *Raw material producers:* includes the fibres, for varying fibre structures and dyestuff manufacturers.
- *Material producers:* these includes the processes such as spinning (for yarn manufacturing), Weaving (for fabric production) and Dyeing and Finishing of the produced fabrics.
- *Accessories producers:* These accessories include Zip fasteners, sewing threads, buttons, elastics, interlining, etc.

However they are a formidable player in the integrated supply chain, depending upon the aspect of their technical and innovative prowess.

2.4.2 Assembly and Finishing

In this aspect the companies that are discussed are generally garment manufacturing companies. How they differ from each other is discussed as follows: [9]

CM (Cut and manufacturing), only cutting and manufacturing services are sold to customers, who supply full product specifications, patterns, all materials and accessories for the orders.

CMT (Cut, Manufacturing and Trimming) is the similar concept to the CM with the exception of the fact that the customer only buys the fabric and ships it to the manufacturer, rest of the accessories and raw materials are bought by the manufacturer. Manufacturer charges the buyer a price including these accessories as well as manufacturing costs.

Full Package (Full price Sub-contracting) price includes cutting, manufacturing and all materials. Specifications regarding the product and materials are provided by the customer. Suppliers buy the materials and sell the garment for its price.

Private Label is a concept where manufacturer (supplier) independently or jointly with customer designs the products as well as selects the materials but the products are supplied under the retailer's brand.

Own Label implies that the buyer buys from the manufacturer's collection and sells it under the manufacturer's brand name.

CM and CMT manufacturing concepts are generally put into practice for the low cost manufacturers, who are at the least of their value added capabilities and skill level required is also quite thin in most cases. This transaction is done in countries like Russia, African and least developed countries of Asia. With full package and, preferably, private labels the value added by the suppliers are reasonably high which requires enough resources and skills. Manufacturing countries include China, Hong Kong, Taiwan and South Europe (, Portugal, Greece and Turkey). (Figure 4)

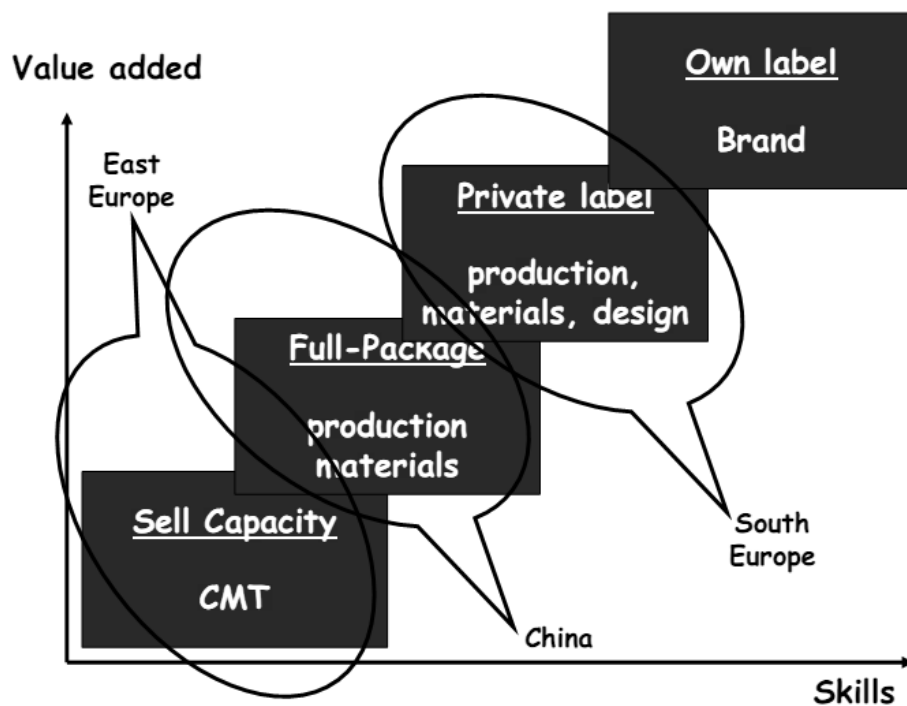


Figure 4. Value added stages and origin classification, [9]

2.5 Retailing

The Global apparel chain in today's business world is characterised as a buyer-driven chain. As it's generally said and believed that Customer is a king and it is buyer's market. Therefore in order to meet customers' expectations and satisfaction levels retailers play a significant role. As Retailers bridges the gap between small quantities – more variety at convenient place and time at reasonable price [28]. Retailers provide an insight of the market trends to the upstream levels i.e. manufacturers as they are in close contact with the end consumers. Despite its strong reliance on manufacturing, Zara

thrives more on the backward vertical integration (retailer to manufacturer) in order to assess the fashion anomalies and respond abruptly than to strive to achieve manufacturing efficiencies. [26]

It is producer's ultimate wish to expand their business by reaching more number of customers and by covering wider market range. This objectivity is hindered through differing factors depending upon the market and producers capabilities (such as: little knowledge of local market, customers, level of competition and limited financial and human resources respectively). Increased retail concentration in apparel market is considered as a key driver of increased trade as this increment in concentration is usually accompanied by the displacement of independent stores by retail chains [26]

With most of the value addition is enacted into the retailing part of the value chain more and more business models are repositioning themselves to achieve better return on their investments. Retail dependent models being deployed in modern apparel industry are the Brand retailers (H&M), Vertical Companies (ZARA) & Multi-Brand Retailers [12]. These are few of the most successful companies that have adopted retailing as the major source of their competitive edge against other competitors that are included in production clusters or in Intermediaries.

2.5.1 Retailers Critical Aspect

In order to be competitive and profitable retailers need strategic planning for some important decisions regarding product selection. These decisions encompass the following domains: [27]

- Assessment of the market and its needs (*Market Positioning*) is very important aspect of managing to target a market. This includes the know-how of customers taste, competitor's threat, market demand, etc.
- *Category Management* is another very important aspect of retailing that enhances the sales and in turn profitability by satisfying customers through the strategic management of product groups. However, in case of the product range it is termed as assortment planning. Retailers have to be very certain about the product variety and its inventory levels in order to satisfy the customers without compromising their profit margins. Product categories are also identified in different roles to attract the customer such roles are retail brand reinforcer, cash flow contributors, profit generators, service providers and destination. (Appendix 1) [12] Failed attempt to reposition to a more fashion driven assortment is termed as *a fashion miss* and have resulted in profit margin slump for many industry players, such as The Gap.

- *Pricing* is another key decision that retailers have to attend to. Price can be a leveraging factor for many players involved at the retail level. Pricing is generally decided after keeping in mind the prices of the competitor and the market demand for that particular product.
- *Place* implies the location of stores where the retailer can affect the maximum traffic of the consumer coming into the stores. Store locations are generally the upmarket places for high end retailers.
- *Promotion* refers to the communication of the information - relating to the differentiating factors of a retailer - to its target market in a manner that builds the image of its brand. This image building can be achieved through different promotional techniques, including: store atmosphere, ambience, layout, displays, etc.

2.5.2 Sales Channels

The global business, poses some serious challenges to the players involved in the fashion industry like deflation, high unemployment, lower consumer confidence, etc. Retailing competition is strongly influenced through price; however product range is also critical to the differentiation. The organizations respond to these challenges in different ways, such as: sell only their designs and labels in order to create differentiation from their competitors [12], some rise to face the challenge and entrepreneurially ensuing to the different new formats, other persists with their competitive advantages by driving down the costs and through the adoption of sophisticated & efficient methods to manage their businesses. Some of the most common formats, in fashion industry, to gain competitive leverage in the realm of sales channel are discussed as below:

Brand Manufacturer designs their own collection and sells under their own brands. The emphasis is largely on enhancing the brand value instead of the production capacity. Although these retailers own their production facilities but still the production outsourcing is sought. Largely, in order to utilise the production capacity of the Eastern Europe or low cost regions, primarily bought for a very low value adding CMT basis. Gradually they are turning into brand marketers. Hugo Boss is one example for branded manufacturer.

Branded Marketer designs their collections and sells them under their own brands to various retailers – as they do not own retail outlets except perhaps a few flagship stores, and they have no production of their own. Production is fully outsourced to East Eu-

rope and Asia. These firms prefer to buy on Full-Package basis. The brand, design and marketing are the keys to success. Chinese like most Asian companies sell Full-Package services. Examples include retailers like Nike.

Brand Retailer chains design their own collections and promote their own retail brands. As they are the weakest of these three in terms of material and technical know-how, they prefer to buy on Full-Package or Private Label basis (manufacturer designs a collection but products are delivered under customer's brands). Private label service is available from South Europe (Portugal, Greece, and Turkey), Hong Kong and Thailand. Examples are H&M and Mango.

Luxury Brand Retailers are categorised as speciality retailers with relatively higher mark-ups than other retailers due to the premium product and its higher quality. These retailers design, brand, market and sell their own brands. Normally these are classified as the slow fashion carriers in the competition of retailing. LVMBH and Prada are some classified luxury brand retailers.

Multi Brand Retailers sell the supplier labels and/or private labels at their outlets. Generally, focus on design and marketing is relatively less. Large retailers operate directly however, small retailers buy through the buying association. Generally these retailers focus on strong distribution channels. Ted Baker is one example for Multi Brand retailers.

Branded manufacturers, branded marketers and branded retailers all exercise tight governance of the supply chain. They have detailed market information. Design and product development is fully controlled by them. They need reliable manufacturing partners in East Europe and Asia and the aim is to be market driven. But despite of all this effort the performance of the supply chain is rather poor. Ownership of business processes by companies in different categories is shown in Appendix 2. As result of long lead time, demand forecasting is difficult, and the errors have to be covered by high price margins.

[12]

3 SUCCESS FACTORS

3.1 Forecasting

To cater for market turbulences characterized by the unstable and unpredictable demand levels, heterogeneous desires, price, quality and style consciousness, high level of buying power, competitive intensity, product differentiation and saturation, the retailers of fashion industry rely heavily on forecasting the fashion (future trends). In this evolving era of technology, market, and consumers are shifting from traditional, static, demographic based criteria towards a dynamic, modern, lifestyle and psychographic influences. This shift makes fashion subject to rapid changes and makes forecasting more challenging.

Fashion buying will always rely on intuition and gut feelings about the market. When this is combined with a structured approach to planning and the use of research, more accurate forecasting is possible (Blackwell). Forecasting is an important tool for the retailers in order to enhance the retail performance. In today's business world, learning how to deliver the researched products (forecast) is – maybe- more important than the production of products. Because at the end of the day, what retailers strive for is to provide customer the right product, at the right place at the right time.

In the eighties, the average lead time in apparel industry from a raw material to consumer was about 66 weeks. Out of which only 11 weeks were related to the manufacturing and 40 to warehousing and transit. The final 15 weeks the garments were just waiting in the store. Nowadays, 12 months lead time is common. It is estimated that 40% of forecast error is incurred to this lead time. Shortening this lead time to 9 months would depreciate the forecast error to no less than 23 %. Each additional shortening of this lead time will result in reduction of forecast error to minimum of 4 %. So even at the beginning of the season it still is 10%. (Lowson et al., 1999) [12]

The complexity for the retailers towards responsiveness (of demand) can be imagined by the lock down effect of lengthy product development timetables and globalised supply chains. This, then, creates a window for the retailers to forecast, delving into the demand curves of products (Customer scan), relying on the statistical tools and previous sale history (fashion scan), and cultural indicators are the few effective measures at their disposal, conferring from the figure 5. Birtwhistle et al (2003) identifies previous sales history as major lead into forecasting as does Abernathy et al., (1999) who says: *Buying*

is based on forecasts which take into consideration historical sales from previous like seasons both in terms of volume and product mix. [9]

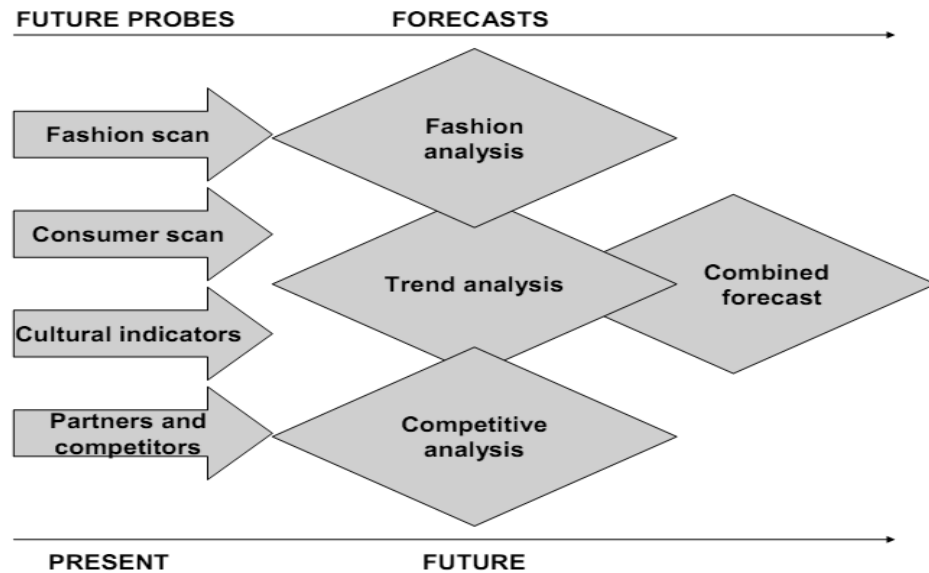


Figure 5. Fashion forecasting requires a balanced view of all aspects and indicators for fashion and demand trends [9]

3.1.1 Demand Forecasting and Implications

In practise, the decision making in terms of the product offerings to the consumers is a rational sort of prediction utilising the best available consumer intelligence but the success rate of these predictions is notoriously low. Christopher et al. (2004) states that, *by their very nature fashion markets are volatile and difficult to predict.* [3]

As already been discussed about the complexity of forecasting process, forecasting errors have some daunting implications, which are [9]:

- Total error, i.e. total purchase is too high or too low compared to demand.
- Style error, meaning that (actual) demand for particular style or design was higher or lower as compared the (anticipated) demand
- Colour error, implying the inaccuracy of predicting (right) colour.
- Size error: means that size assortment did not comply with the demand.

Focusing further, forecast errors are classified in terms of positive forecast error (in case the forecast was too high) and negative forecast error (when the forecast is too low). The impact of these errors is astounding and measured on the basis of following: (Figure 6)

Positive forecast error

- Unsold good
- Reduce price (Mark down)
- Profit loss

Negative forecast error

- Stock-out
- Lost sales
- Bad reputation

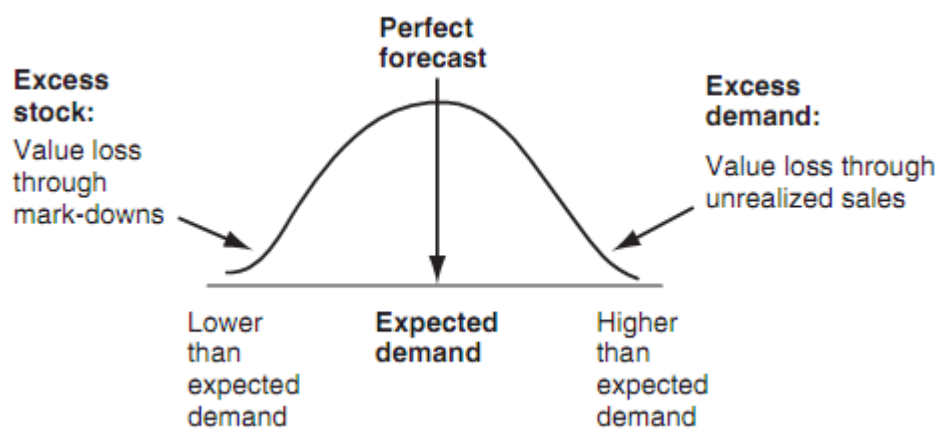


Figure 6. Demand & Forecast [9]

3.1.2 Obstacles and Sales Forecasting Framework

Relying on the above discussed impacts of fashion forecasting and subsequent accuracy related matters, it can be inferred that understanding of the forecasting realm is of utmost importance. In order to bridge the gap of theoretical forecasting benefits and practical outcomes of the forecast, Essam et al. (1992) proposes the main aspects to be looked into, as: [16]

- Understanding the Gap: Managerial Understanding
- Data Sharing Gap: Industry need for confidentiality
- Political Gap: hidden agenda of management.

Addressing to the above mentioned obstacles, Donna (2007) provides a framework as shown in Figure 7, Sales forecasting management (SFM) framework directing the management attention to four crucial areas which are abridged as under: [15]

Sales forecasting Climate suggests that a manager must count in the examination of the forecasting climate as an opportunity towards better forecasting performance, this climate hinges on questioning commitment level of the managers to sales forecasting, revealing the credibility of forecasting and challenging long reward structures.

Sales Forecasting Capability: relies strongly on building a shared interpretation of sales forecasting. Firms are investing hugely on the technology aspect of information logistics.

Performance Outcomes: as can be seen from the figure 7, this relates to the linking of the forecasting performance to the business performance. Developing useful measure helps the managers to get the information to diagnose the problems and motivate changed behaviours, necessary for achieving different performance outcomes.

Performance Measurement: acts as the opportunity to improve forecasting accuracy when viewed as a source of valuable information for building sales forecast capability.

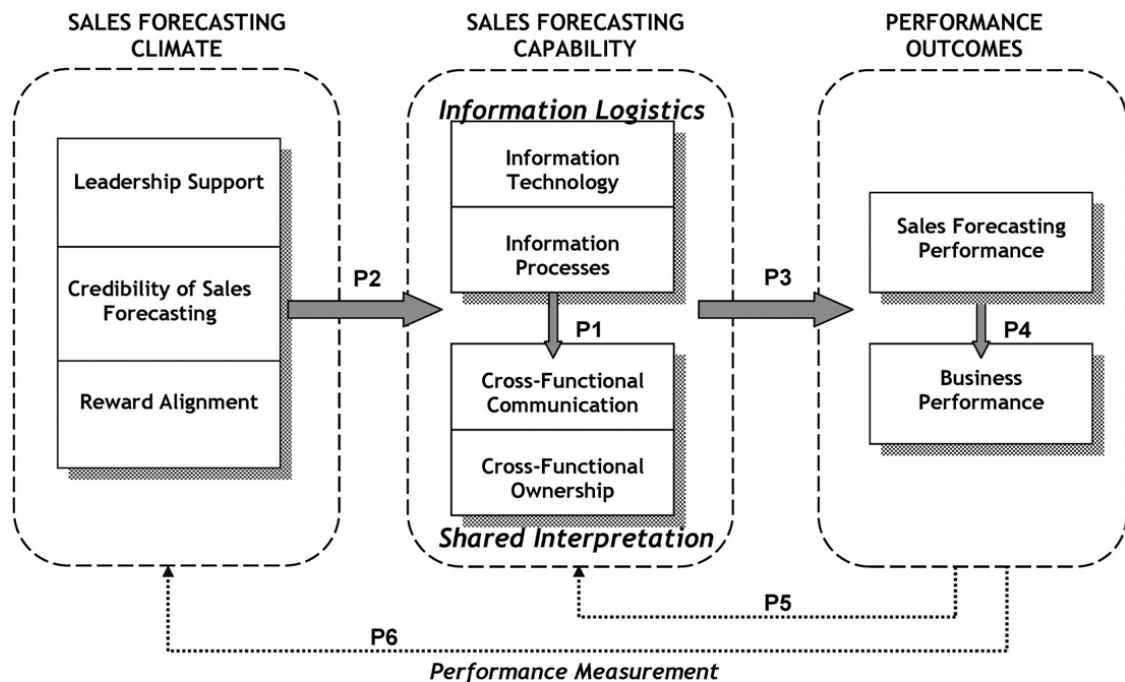


Figure 7. Sales forecasting management (SFM) Framework, [15]

3.1.3 Alternate Approach

Forecasting plays a vital role for all business models involved in Fashion Supply Chain but there have been some cases where the reliance over forecasting have been minimized. This in turn helped in reduction of forecast errors to a considerable margin. This implementation of an alternate approach is discussed in the Case Zara, as follows:

Case Zara

Zara's vertically integrated manufacturing operations provided them with the leverage of constant introduction of new items and – that too- with short lead times. Utilising this network the time taken from the conception of design to its production and into the distribution channel was only three weeks. Two days later that garment could be on the sales rack in stores around the world. This responsiveness nature of its vertically integrated operation enabled Zara to an unmatched success in responding to the fast changing and unpredictable taste of its target customers. As a consequence of this inline design, fulfilment and manufacturing efficiency Zara did not have to rely on accurate long range sales forecasts. Zara did not have to predict or forecast what would they be selling in next six months not even for a month ahead of its selling season, as it based its operations on sensing the demand of the customer and respond abruptly.

Zara's push strategy drew its power from the freshness of its offering and with added exclusivity to it through a sense of scarcity. Loyal customers kept track of the stock replenishment in the relative stores as about three quarters of the merchandise in the stores was changed in a span of three to four weeks of time. The target was to reduce the inventories that have to be sold at the mark-down prices later in Zara stores during sales. Zara have 15-20% sales at marked down prices relative to 30-40% in comparison to other, more traditional competitors. Even Lost sales may have occurred at Zara but its impact was nullified as a more fashion savvy item was made available to its customers. This helped them in creating an image based on scarcity and opportunity. [26]

3.2 Buyer-Seller Relationship

One aspect in fashion industry that offers a competitive leverage, to the players involved, is the efficient management of network systems among supply chain members (Kim 1999). This implies the shortening of the supply chain with the objective of manufacturing products in precise quantities and varieties, identified from the development of sales. Much emphasis is given to the success of supply chain in terms of geographical proximity, direct interaction, informality, and face relationship among the suppliers and buyers, at the same time practices to improve the existing supply chain model has been somewhat ignored (Ho et al., 2009). [13]

As demand becomes the main logic for supply chain management, focus on the chain of activities that communicate demand from the market to suppliers shifts and coined as demand chain management. This focuses on the knowledge sharing that connects sourcing to manufacturers with the market requirements to better match supply with demands. The aspect of technology adoption & process innovation to speed up supply chain, reduce system wide inventory and appreciates the resource utilization with sustained cash flows. [29]

Starting from Porter's Value system (Figure 8), for a traditional supply chain, representing, the demand (information) and supply (goods) as the two sides of a same coin.

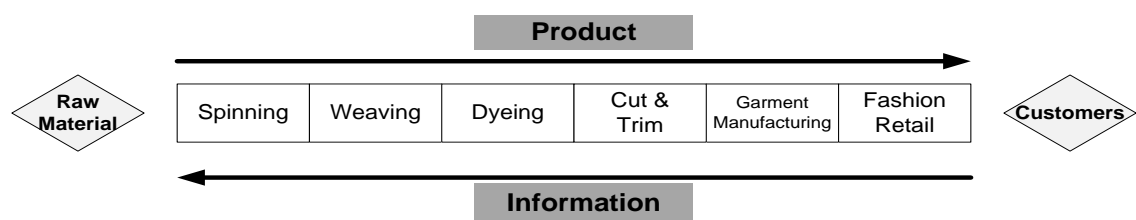


Figure 8. Traditional Supply chain [13]

However, Hoover et al, (2001) hinted a distinction in value system by categorising them into more demand oriented or more supply oriented. This breaks up the value system into demand side, represented by the retailers encompassing the assortment planning, inventory management, and purchasing, and supply side where manufacturers have the onus on sourcing, manufacturing, packaging and distribution, as shown in Figure 9. Relying on the distinctions made as above with the retailer's perspective of the supply chain termed as demand chain and manufacturer's perspective as supply chain, Hoover was able to precisely discuss the importance of improved connections between both perspectives.

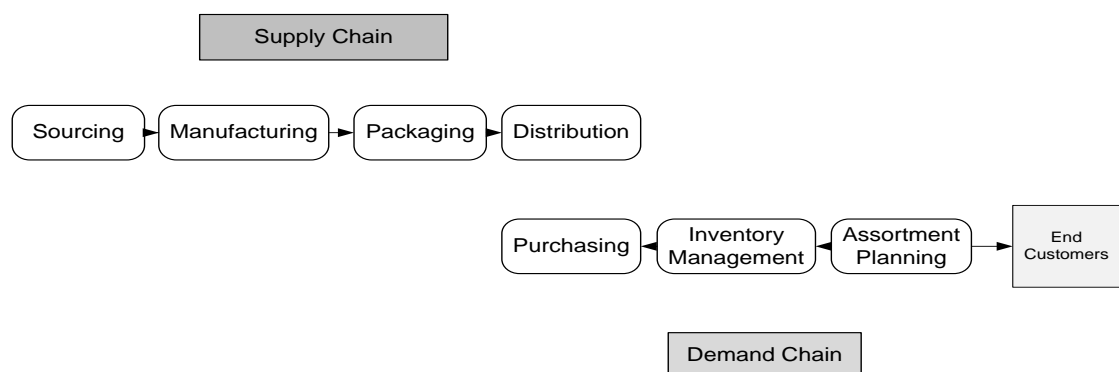


Figure 9. Break up of conventional supply chain. [13]

3.2.1 Buyer's Supply Chain Management

From the purchasing function of the demand side different connections can be made with different functions of the supply side (shown in Figure 10)

Purchasing with distribution Ship to order, assuring more rapid delivery. For this the supplier must probably invest in larger inventory – which is not widely expected.

Purchasing with packaging (including final assembly of components) “Assemble to order”, often regarded as mass customization, with a specific focus on the customer requirement. This entails that the customer will have to wait longer for the order fulfilment.

Purchasing with manufacturing, manufacture to order, involves more specialised form of mass customisation. Entailing more delay for the order fulfilment and less efficiency for the producer.

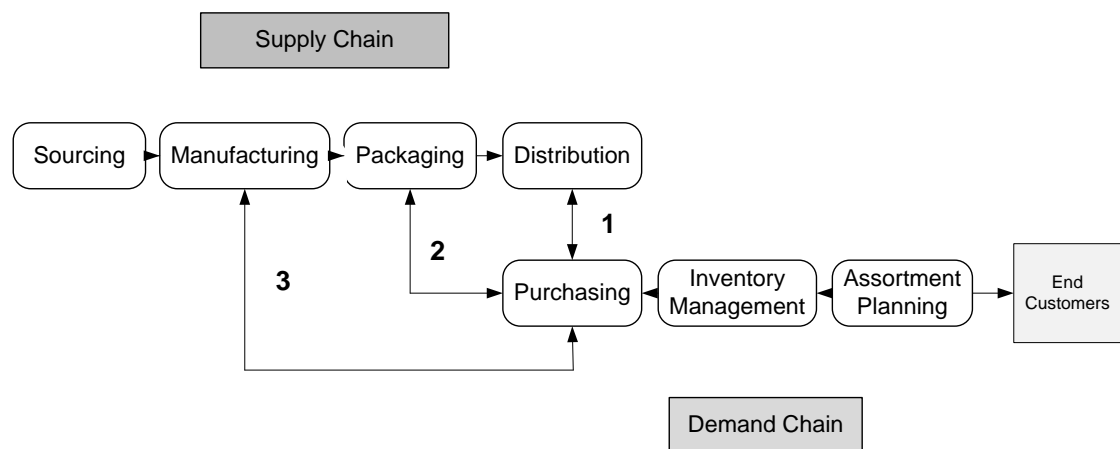


Figure 10. Moving the Order Penetration Point upstream in supply chain. [13]

In this particular case there exists some trade-offs between the demand and supply, ensuring a no win-win situation where both parties can benefit equally. However, supply side has to bear most risks in this form of cooperation.

3.2.2 Supplier's Demand Chain Management

Explores, the opportunities for the supply side to link with the demand chain. Hoover et al. (2001) [13], helps to distinguish between four possibilities: (see Figure 11)

- (1) Identifies, the connection between distribution and purchasing resembles the buyer-seller relationship, as the first form of co-operation (“ship to order”). Representing a simpler form of QR where upstream suppliers bear more risk of keeping stocks.
- (2) Manufacturing, packaging or distribution with inventory management (e.g. based on the customer’s POS sales data). A true execution of ECR where manufacturer offer to monitor carefully the customer’s inventory levels in order to be able to fulfil future demand more efficiently. Customers, therefore, are enabled to reduce the cost of the inventories. However, this requires a good knowledge about the possible seasonal patterns in demand.
- (3) Manufacturing with assortment planning. “By collaborating on the assortment determination in retailing, as the supplier and retailer look together at consumer demand categories that the supplier’s products serve. Suppliers are also expected to use this collaboration to improve their delivery performance” (Hoover et al., 2001). This pattern is conceptualised in CPFR.
- (4) The supplier steps further and try to supply to the end consumer directly. This is classified as verticalization, followed by some manufacturers-retailers (like Zara), or designer-retailers with outsourced manufacturing.

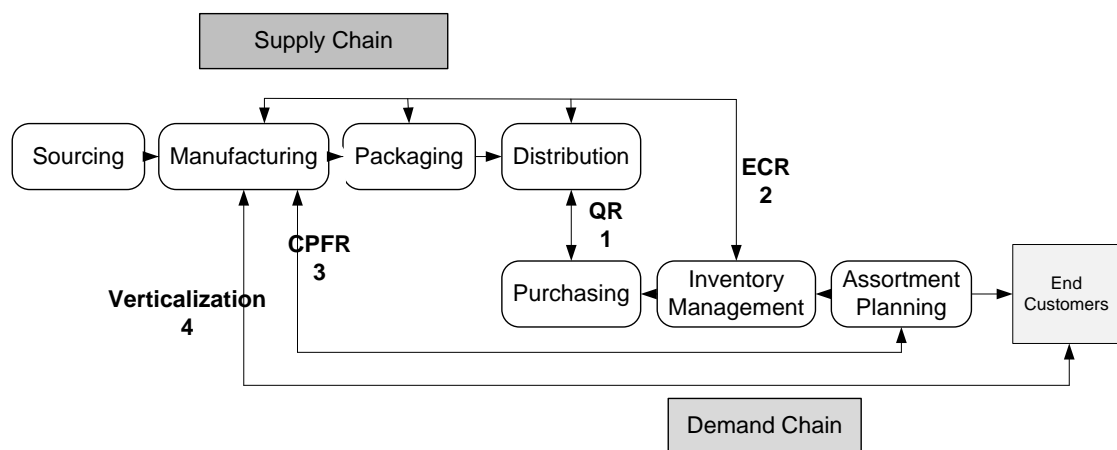


Figure 11. Shifting the Value offering point downstream in demand chain. [13]

These different possibilities emphasise the role of the supplier through “value offering point” ever more downstream in the demand chain. It is generally believed that consumer’s intelligence is the Achilles heel of demand chain management but if suppliers and retailer can manage a higher degree of trust in the field of information and knowledge sharing it will only create a win-win situation, benefitting both the parties. As the ability

to leverage information technology and process innovation to speed up the supply chain, reduces system wide inventory and resource utilization is optimised.

Concluding from the above discussion Dany Jacobs [13] presents the two most promising options for a win-win situation in demand chain management as:

- Co-operation in the field of inventory management and replenishment.
- Co-operation between assortment planning and manufacturing, including innovation.

3.2.3 Obstacles in Demand Chain Management

Reflecting back to the above mentioned two points, demand chain management is spelled as the balancing of the demand and supply chain orientation within one firm, which is the practical implication of the first of the two points that is cooperation in the field of inventory management and replenishment, vertically integrated firms, e.g. Zara-Inditex, already work on the second option. As far as implication of the second point is concerned the strategic leverage that the firms seek is the biggest hurdle, as manufacturers sought to build on one brand and preserve their own form of consumer intelligence and so does the retailer companies, making them too narrow minded to make this a possibility. Also qualitative discussions and exchange of fine grained information is required. The increasing “rationalization” of inter firm relationships into the direction of only economic and calculative arm-length relationships, endangers this kind of adaptive learning. [13]

Outlined are few of the conspicuous obstacles, as follows:

- Under investment in consumer intelligence and prevailing control logic within fashion firms.
- Conflict of interest between manufacturers and retailers in fashion.
- Inability to differentiate the concept of demand chain management with the supply chain management.

3.3 Corporate Social Responsibility (CSR)

Corporate Social Responsibility (CSR) begins where the law ends, i.e. it is about what companies do in order to express their awareness towards making contribution to society above and beyond the legal obligations. The reasons behind the adoption of CSR includes: meeting customer expectations, demonstrating commitment to environmental responsibility, improved environmental performance, staying ahead of legislations, and increasing employee motivation.

Carrol (1979 & 2008) [24] describes the basic expectations that a society heeds from the businesses, namely:

- Economic Responsibility –Be Profitable, fundamental to the existence of majority business organizations.
- Legal Responsibility –Obey the Law, focusing the companies to remain confined to Law while pursuing economic missions.
- Ethical Responsibility –Be Ethical, Creating win-win situation for the business, customer & society by going beyond legal compliance.
- Discretionary Responsibility –Be a good corporate citizen, including philanthropy, contributing to quality of life, without explicit expectations.

The business dimensions for CSR branches out to wide range of potential benefits, including Improved financial performance & profitability, reduced operating costs, long term sustainability for companies and their employees, good relations with government and communities, better risk and crisis management, enhanced reputation and brand value, and building closer links with the customers and assessing their needs. [19]

3.3.1 Ethical Clothing Market

While fashion industry is striving to adapt to the modern day challenges, addition of CSR throws more challenge towards the consumerist & producerist society. Ethical issues affecting clothing industry were related to the environmental and social responsibility, such as: use of pesticides in (cotton) production, volume of clothing consumption, working conditions of the employees and disposal of the used clothes. Ethical clothing is rapidly growing sector, valued at £89 million in UK in 2007, 79 % rise from the previous year, forming part of a market for ethical products worth £35.5 billion (Co-operative Bank, 2008). Fast fashion in its essence stokes the tendency towards throwaway fashion attitude, with the increased frequency of fashion purchase. On contrary, market research in UK found that ethical consumerism is increasing about 35 %, for adults identified as Green & Ethical Crusader (Mintel, 2008). This ultimately induced the companies towards the adaptation and implementation of ethical trading principles as an integral part of the organizations overall marketing strategy. [17]

Global sourcing proved to be the major driving force behind ethical concerns in terms of child labour, minimum wages, excessive overtime and health and safety related issues. Ethical consumerism interest was partly influenced through the negative publicity of renowned brands, GAP and NIKE, as they were accused of producing some of their merchandise in offshore sweatshops. Gap Inc. (2003) published reports on the major ethical problems the supplier in international market face highlighted by their efforts to be transparent in their operations and management of these issues ethically, recognising consumer's increasing demand to this information. [36]

3.3.2 Retailer's CSR

In response to the ethical concerns of consumers businesses focused to convene CSR to their business model, that too, by superficially adopting the CSR. They just complied with the human rights and employment issues to address the major concern of sweat-shop issues, whereas went lose in the ethical selection of suppliers, as it was deemed unprofitable to their already existing business practices.

Consumers have become so influential that they can force companies to act in an ethical or sustainable way as well as the retailers are vary of the media coverage to unethical business practices may invoke the reaction from the consumers and thus affecting the reputation. These factors have therefore, correlated in such a way that CSR in today's industry have become an integral part of organization's make-up. Coining the phrase Triple Bottom Line widely used in relation to CSR, in efforts to identify environmental and social concerns are becoming significant to business in addition to financial sustainability. [17]

In modern business environments organizations concentrates on the aspects of their interaction with the society not only in marketing and communication but on a wholly basis by aligning their business operations and engagements with social and environmental issues, including the implementation of CSR practices. In effect, there is emergence of business-based brand relevant approach to CSR where companies address social and environmental issues through their core business (Googin, 2007) [17]

3.3.3 Measurement of CSR

With the growing concerns over CSR; customers, investors, trade unions and labour organizations, pressure groups, government and non-government organization become increasingly informed and demanding, organizations look forward to showcase their CSR commitments to build, enhance and retain reputation and competitive advantage in the market place.

To date, the measurement systems used and various concepts of CSR have no systematic basis, indicators are chosen depending upon the organization preferences. Companies use the key performance indicators (KPI) to measure, monitor, compare and benchmark their CSR achievements and performance. Some retailers report on CSR in a summary, or other selective ways, with a deeper focus of illustration to CSR commitments in a user friendly manner that helps in offering the recognizable details that otherwise maybe perceived as dry or incomprehensive measure of the achievements. This measurement enables the organizations to compare their CSR management practices and performance with the other player involved in the business as well enables the organization to publicly evidence their credentials to a range of stakeholders. [19]

3.4 Supply Chain Management Competence

Supply chain includes fragmented parts - of its value chain- where each part is striving to add more value and increasing the interdependency. These value additions are seen through the forecasting, inventory management, commitment to technology, etc. relating to the competence of an individual fragment in that value chain. But as understood SCM, will ultimately separate the winners from the losers. Very little has been achieved in terms of establishing the empirical relationship between SCM competency and a business organisation performance. This identifies a scarcity of proven metrics for quantifying effects of SCM. [29]

SCM competency is largely responsible in creating or destroying shareholder value, by affecting the key drivers of an organisation's financial performance: revenue growth, operating costs and working capital efficiency. SCM competency, being the key financial driver, deserves to be considered a success factor as a mean of creating competitive advantage. As most of the literature considers integration of supply chain as a key contributor, which it is, but it fails to take the whole SCM competencies into fold. These critical competencies relating to the holistic view of SCM are listed as follows: [29]

- Supply (supply chain execution, supply management & manufacturing)
- Information (sales & operation planning, application of technology & performance management)
- Demand (service management, demand sensing & demand shaping)
- Product (lifecycle management, launch & innovation)

3.4.1 Supply

This competence encompasses the supply chain execution, supply management & manufacturing. Rapid, constant change is continually challenging supply chain executive's ability to adapt. Manufacturers being able to react & respond to the environment that frequently changes while continuing to satisfy customers and achieving business objectives are considered to be agile. Dove (1995, 2001) [29] illuminates the approach that companies able to respond to change triggers are those that respond successfully based on four change proficiency metrics:

- Cost
- Time
- Robustness
- Scope

Cost & time highlights the fact concerning the changes being implemented quickly and at reasonable costs. Robustness reflects the management of change as impeccable, and scope defines the magnitude of the change that can be dealt with in future. [34]

SCM is dealing with the unforeseen threats and dangers resulting from unimagined factors such as rapid wage inflation in low cost labour markets, hike in commodity prices and so on, which are becoming more and more impactful. As in case of escalating fuel prices, this leads managers into reviewing their overall distribution strategies like engaging third party logistics or other alternatives. With such dynamism and volatility in cost and other operational fundamentals it is imperative to design the supply chain strategies which can enable companies to gain leverage on flexibility to these threats. Companies with successful strategies to cope to these changing market conditions and variable cost structures through agility in their supply chains are believed to be the antidote for cost volatility. [30]

However the cost constraint gains much of their attention, far ahead of enterprise growth and product innovation. Much of efforts and actions are generally intended towards achieving better efficiency on the revenues deployed. Economic Value Added (EVA) is a financial metric use to measure the economic profit and relies on the value creation from the shareholder value. This metric generally affects the SCM competency in four domains which are: operating costs, fixed assets, working capital, and revenue growth. Negative value of EVA indicates the greater value of cost of revenue employed than the profit after tax and positive value reflects the optimization of shareholder value. [29]

3.4.2 Information

This competency deals with sales & operation planning, application of technology & performance management of a supply chain. One core aspect of information is visibility which is a very challenging yet productive tool for leveraging competency.

When we talk about supply chain visibility, it does not simply mean visibility into your own supply chain. It means visibility among partners, which enables collaborative decision making closer to the customer. This is both a science (managing technology) and an art (using information and metrics for competitive advantage) – Bob Stoffel, VP, United parcel service of America. [30]

In order to meet the demands in a more efficient manner customer information is critical. This requires a visible supply chain as it is easiest to replenish the product automatically based on the PoS data but not all of the sold products are needed to replenish. Cooperation in the field of inventory management and replenishment and between assortment planning and manufacturing - including innovation- all asks for a higher degree of consumer intelligence [14]. Even with the awareness of wants of the consumers and better data regarding sales, it still is not enough without technical solutions. For a more smarter, visible and flexible supply chain there are three critical aspects mentioned below: [30]

- Instrumented – Supply chain data that has previously been manipulated by the people will be dealt with sensors, RFID tags, meters, and other devices and systems. RFID has been engaged to improve supply chain process such as handling material and information with better efficiency and that too without human intervention [32]. This enhances visibility as supply chains will not only be able to see more events but also monitor them as they occur.
- Interconnected – This interaction creates a more holistic view of the supply chain through connecting not only with customers, suppliers and IT systems but also with the objects flowing through the supply chain. This creates an opportunity for an extensive interconnectivity to coordinate and integrate worldwide networks of supply chains.
- Intelligent – These intelligent systems potentially can translate into supply chains achieving predict and act stage from sense and respond stage. It deals with making the supply chain capable of learning and assisting the managers in evaluating the trade-offs for various scenarios available.

3.4.3 Demand

Demand entails the subjects of service management, demand sensing & demand shaping. ‘Demand fulfilment’ is the easier part after the demand is known; it is the ‘knowing part’ that is difficult. Rising customer demand and the need to gauge these demand - as precisely as possible- presents a challenging situation to the supply chain. Generally, the focus of organizations is more towards the supplier interaction than their customers. Even with the incorporation of technology supply chains are still not able to interact directly to the customers for demand planning as they deem it as costly and time consuming, however, with the need to be more profitable they may be enticed to accommodate excess inventory, lost sales, and missed opportunities caused by inadequate customer collaboration. [30]

Accurate and precise demand sensing and shaping allows the companies to improve the level of service, implying a higher level of customer satisfaction with increase in market share and profitability. Firms with higher level of customer satisfactions are believed to be generating higher returns on investments, productivity, market value added and shareholder value. Even with increasing and maintaining higher levels of customer service results enhanced customer loyalty serves as a shield against increasing price competition and commoditization of products. [29]

3.4.4 Product

In the current global fashion retail industry the risks at large such as: global recession & hiked fuel prices, are affecting the consumers spending to slowdown. Connecting the aforementioned challenges to the ever maturing industry, characterised by an over capacity of stores & consumers with wider assortment of shopping possibilities, have cre-

ated an extremely competitive business environment among retailers. This demands retailers to look at the ways to compete other than the price, which is viably touted as product development (differentiation).

In order to compete, retailers have considered product and design development as a tool for differentiation and to revitalise the merchandise mix. However, achieving the product differentiation requires a foresight -to develop a consistent concept - originating from the thorough understanding of the product and consumers. This enables the retailers to drive the competition, by offering them the product which satisfies their perceived value.

Successful product development requires product to offer features related to superiority & uniqueness from the customer's point of view. This can be achieved by assessing customer's needs & preferences & competitors through market research [32]. This product differentiation must be able to cater few challenges such as fashion misstep; which is not trend right, has fit problems, or not priced competitively, creating a negative image and in turn affecting the sales. Also other challenge relates to the cannibalization, related to eating away of one of its established market, affecting a hidden costs of introducing a product into the market that is already served. This makes the fashion environmental scans all the more important realising the trends and lifestyles.

Product success variable are underlined as follows: [32]

- Differentiated product/ Brand
- Lifestyle Driven
- Perceived value

4 SUCCESS MEASURES

4.1 Key Attributes

Success measure is the specific quantitative representation of a capacity, process, or outcome deemed relevant to the assessment of success. Key attributes of performance measure can be listed as follows. [20]

- *Validity*: a valid measure is one that captures the essence of what it professes to measure.
- *Reliability*: a reliable measure has a high likelihood of yielding the same results in repeated trials, so there are low levels of random error in measurement.
- *Responsiveness*: a responsive measure should be able to detect change.
- *Functionality*: a functional measure is directly related to objectives.
- *Credibility*: a credible measure is supported by stakeholders.
- *Understandability*: an understandable measure is easily understood by all, with minimal explanation.
- *Availability*: an available measure is readily available through the means on hand.
- *Abuse-Proof*: an abuse-proof measure is unlikely to be used against that which is, or those who are, measured.

Success measure gives an insight to its stake holders, people or groups who are interested about the activities of a company. The activities include purchasing the raw material, sales and marketing and also the general management. Companies rely on these metrics to assess their financial health and as a representation of its progress to the stakeholders. In particular this financial information helps to understand how profitable or indebted a company is, also how good a company utilising its resources. Here, financial ratios are categorised to understand the success of the companies in different aspects of their businesses.

4.2 Profitability Ratios

These ratios help to understand how efficient a company is using its resources to generate profit, in addition give shareholders a better return on their investment. These ratios are as follows: [25]

(a). Gross (Profit) Margin

$$\text{Gross profit margin} = \frac{\text{Net sales} - \text{COGS}}{\text{Net sales}}$$

This ratio indicates the total margin available to cover operating expenses and yield a profit. However inventories and capital turnover are not considered when calculating gross profit margins. (COGS implying Cost of goods sold)

(b). EBIT

$$EBIT \% = \frac{EBIT}{\text{Net Sales}}$$

Interest and taxes are excluded because they include the effect of factors other than the profitability of operations. EBIT (also called operating profit) shows an entity's earning power from on-going operations.

(c). Net profit margin

$$\text{Net profit Margin} = \frac{\text{Net Profit}}{\text{Net Sales}}$$

In comparison to the Gross profit margin, this shows you the percentage of the revenue which a company retained after accounting for all of its expenses (tax and interests).

(d). Return on Investment (ROI)

$$ROI = \frac{\text{Net Income}}{\text{Investment}}$$

It is an indicator of how efficient a company is using the investments.

(e). Return on Asset (ROA)

$$ROA = \frac{\text{Net Income}}{\text{Total Assets}}$$

Portrays the picture of how efficiently a company is using its assets to obtain profit.

(f). Return on Equity (ROE)

$$ROE = \frac{\text{Net Income}}{\text{Average ShareHolder's Equity}}$$

An important measure for the shareholders to evaluate: how effectively their invested money was used to produce profit.

(i). GMROI

$$GMROI = \frac{\text{Gross Margin}}{\text{Av. Inventory Investment (actual cost)}}$$

Gross margin (GM) is most commonly used measure in retailing, but in order to evaluate the sourcing decisions GMROI proves to be a better measure. As GM considers only selling prices and purchasing price GMROI combines margin management and inventory management thus measuring how well the merchandising inventories generate gross profit. Forecast error decreases and replenishment buying increases GMROI since inventories are reduced. [9]

(j). GMROI-R

$$GMROI - R = \frac{\text{Gross Margin}}{\text{Av. Inventory Investment (Retail Price)}}$$

GMROI has its limitation as it doesn't includes the full complexity of retail cost structures as was pointed by (adapted from Mattila 1999) McGoldrick (1992), it also doesn't consider the cost of financing consumer credit or the benefits of supplier credit terms. GMROI-R explains the relationship between turnover and gross margin, and uses inventory value as retail value in contrast to GMROI. [9]

4.3 Efficiency Ratios

These are the ratios typically used to analyse how well a company uses its assets and liabilities internally. These ratios include:

(a). Inventory turnover

$$\text{Inventory turnover} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$$

It measures the scale of inventory in comparison to sale. This ratio is important because gross profit is earned each time inventory is turned over (Stock turnover).

A relatively low inventory turnover may be the result of ineffective inventory management (that is, carrying too large an inventory) and poor sales or carrying out-of-date inventory to avoid writing off inventory losses against income. Normally a high number indicates a greater sales efficiency and a lower risk of loss through un-saleable stock. However, too high an inventory turnover that is out of proportion to industry norms may suggest losses due to shortages, and poor customer-service. [9]

(b). Fixed Asset Turnover

$$\text{Fixed Asset Turnover} = \frac{\text{Sales}}{\text{Fixed Assets}}$$

It measures the sales productivity and utilization of plant and equipment.

(c). Total Asset Turnover

$$\text{Total Asset Turnover} = \frac{\text{Sales}}{\text{Total Assets}}$$

It indicates sales productivity and utilization of firm's total assets. It should be noted that the asset turnover ratio formula does not look at how well a company is earning profits relative to assets. The asset turnover ratio formula only looks at revenues and not profits. This is the distinct difference between return on assets (ROA) and the asset turnover ratio, as return on assets looks at net income, or profit, relative to assets.

4.4 Leverage Ratios

A company's long term ability to pay its debt is called solvency. These ratios help to assess the capacity of a company to pay its long term debts. The leverage ratio has its two main objectives: [25]

- To provide information about the amount of total debt that a company has;
- To give an idea of relation between the shareholder's equity and liabilities of a company.

This information is deemed as important for a company to assess the amount of debts in order to avoid bankruptcy, also termed as Risk ratio, these ratios are as follow:

(a). Debt /equity ratio

$$D/E \% = Total Liabilities/Equity$$

This ratio compares the contribution of banks, lenders, and suppliers; with the contributions made by the shareholder of the company. Company having lower debt to equity ratio than other company indicates that it is using less debt to operate. [25]

(b). Asset to Equity Ratio

$$A/E = \frac{Total Assets}{Equity}$$

It helps in determining the total assets and liabilities of a company.

(c) Equity Ratio

$$Equity Ratio = \frac{Equity}{Total Assets}$$

It measures the proportion of the total assets that are financed by the share-holder.

(d). Gearing percentage

$$Gearing \% = \frac{Non Current Liabilities}{Equity}$$

It expresses relationship between two different types of financing. However, a company with gearing less than 100% ensures a solid financial standing.

4.5 Liquidity Ratios

Liquidity ratios compare the most liquid assets (current assets) of a company against the company's short term debts and obligations (current liabilities).

(a). Current ratio

$$Current Ratio = \frac{Current Assets}{Current Liabilities}$$

This ratio is used as a tool to assess the readiness of a company to pay off its debt, using its liquid assets. Current ratio higher than 1 suggests company's good health in terms of

paying its debts whereas in case if it's lower than 1 company is perceived to have liquidity problems. [25]

(b). Quick ratio (Acid Test)

$$\text{Quick Ratio} = \frac{\text{Current Assets} - (\text{Inventories} + \text{Prepayment})}{\text{Current Liabilities}}$$

This is a more refined form of current ratio as it subtracts the inventories from the current assets, reason being, as many companies face problems to sell of its inventories.

(c). Working Capital

$$\text{Working Capital} = \frac{(\text{Current Assets} - \text{Current Liabilities})}{\text{Net Sales}}$$

Working Capital is the amount by which the value of a company's current assets exceeds its current liabilities after the depletion of sales. It indicates how effectively a company is using its working capital to generate sales.

4.6 Retail Performance Ratio

Clothing industry retailers face many upheaval challenges in order to cope with needs and wants of their customers, where one aspect of the success is to fulfil these needs and wants the other aspect that proves to be daylight for the clothing retailers is to measure their performance. With this information these retailers can buttress their already acquired market share or realise the need to change their strategy, below we will discuss some paramount retailer performance measure. [9]

Although these performance ratios are elusive of the scope of this study in terms of success metrics but still exhibit profound knowledge regarding retail performance.

(a). Customer service level

$$\text{Customer Service Level} = \frac{\text{No. of Customers (who finds their 1st choice SKU)}}{\text{Total No. of Customer Visits}}$$

Customer service level indicates the percentage of customer visit to the store when they find first choice stock keeping unit, through one season as shown in the figure 12 below.

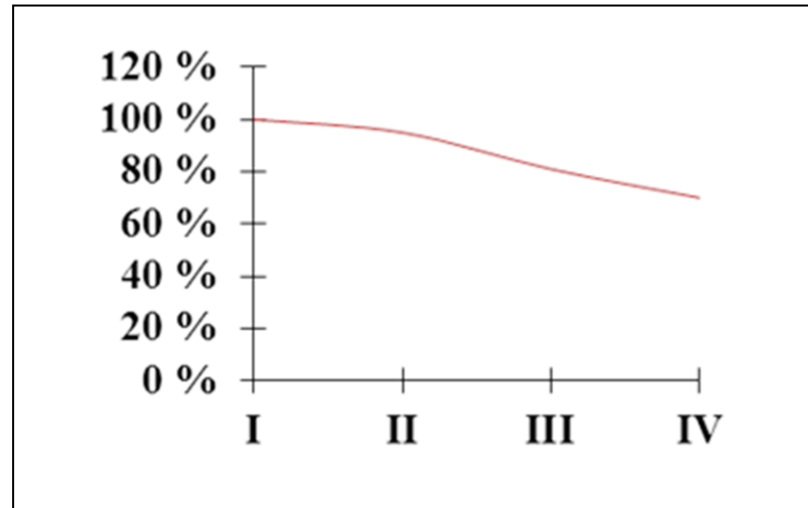


Figure 12. Customer Service Level, [9]

(b). Service level

$$\text{Service Level} = \frac{\text{No. of differnt SKU's (available at store)}}{\text{Total No. of different SKU's (in collection)}}$$

Service level indicates what proportion of the full SKU range is available at the store.

(c). Lost Sales

$$\text{Lost Sales} = \frac{\text{No. of customers who find no SKU prefernce}}{\text{Total No. of customer visits}}$$

Lost sale is the measure of the customers visiting the store and returning back as they find none of his, sought, SKU's. It's a good measure to reflect onto the forecast errors.

(d). Sell through

$$\text{Sell Through} = \frac{\text{Total non mark down sales (in pieces)}}{\text{Total Sales (in pieces)}}$$

This measures the proportion of merchandise that sells at first price, good indicator of how well the supply met the demand.

(e). Mark down

$$\text{Mark Down} = \frac{\text{Mark down Sales}}{\text{Total Sales}}$$

This ratio implies the proportion of all goods sold at reduced prices including those that are finally jobbed off.

(f). Job off

$$\text{Job Off} = \frac{\text{Total No. of Liquidated Products}}{\text{Total Sales (in pieces)}}$$

Job off is the percentage of the SKU's remaining at the very end of the selling season and which must be disposed of at any price. It is also called liquidation.

(g). Fashion Risk

$$\text{Fashion Risk} = \frac{\text{Inventories}}{\text{Net Sales}}$$

This ratio identifies the scarcity of the product that is high in demand. The Fast Fashion Retailers look to reduce fashion risk (inventories/net sales %) which shows that they have reduced; inventory costs and risk of inventory obsolescence.

5 FINDINGS AND DISCUSSIONS

In this research total of 52 Fashion companies (Appendix 3) were studied for their financial data. The data was gathered from the Annual reports of these respective companies; specifically the consolidated statements were selected. These fashion companies were further categorised depending upon the business models deployed by each of them, which were, Brand Marketer (BM)¹, Brand Retailers (BR), Luxury Brands (LB) & Multi-Brand Retailers (MBR). Distribution of these companies can be seen in the Figure 13.

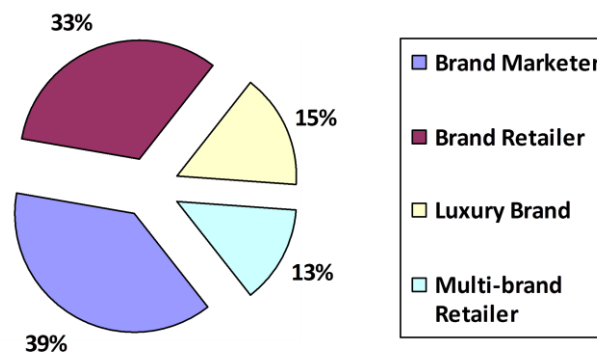


Figure 13. Companies Distribution

The data was formulated into the excel sheet for the year 2009, utilising the data mostly from Income statement and Balance sheet, which was then used to calculate the ratios such as Profitability ratio, liquidity ratio, Risk ratios and efficiency ratios. These ratios are used as a tool to measure the performance of the business model and to do the comparative analysis with the other business models under observation.

¹ For convenience and right symmetry of data, Brand Manufacturers have been treated as Brand Marketers. Considering, the business model evolution of manufacturers towards Brand Marketing.

5.1 Profitability Ratios

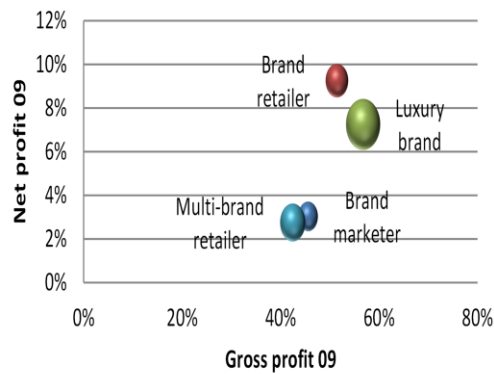


Figure 14. Net Profit Vs Gross Profit (%), 2009

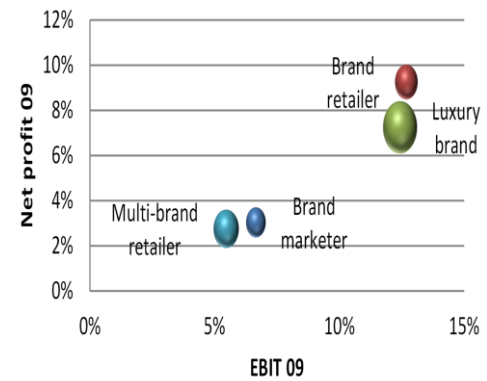


Figure 15. Net Profit Vs EBIT (%), 2009

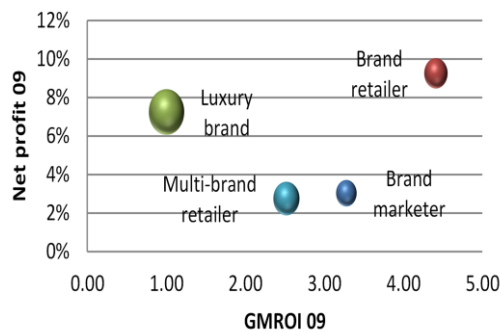


Figure 16. Net Profit Vs GMROI (%), 2009

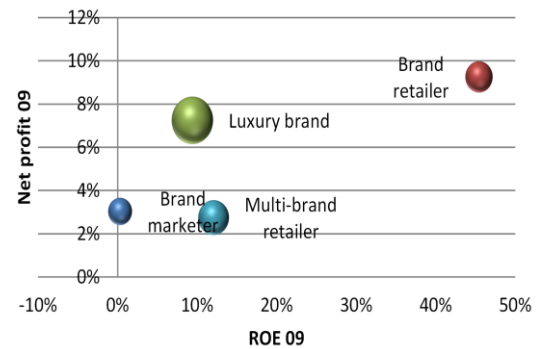


Figure 17. Net Profit Vs ROE (%), 2009

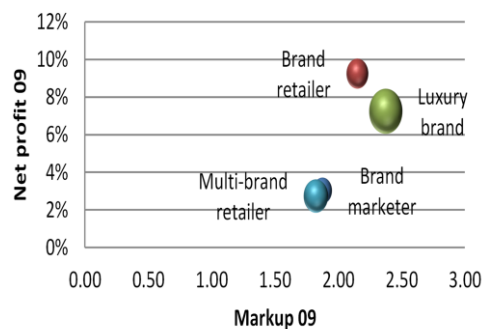


Figure 18. Net Profit Vs Mark-up, 2009

Analysing the Fig. 14 it can be seen that Luxury Brands (LB) perform particularly well with Brand Retailers (BR), this performance from LB is justified by higher value of Brand Equity which is generally associated with Premium quality craftsmanship products resulting in higher sales value whereby the cost of the product (COGS) is remarka-

bly less. The advantage of brands with higher brand equity results in increased brand royalty, premium pricing and low advertisement to sales ratio. Whereas BR's performance can be attributed to the higher sales values by keeping abreast with the consumer demand volatility through accurate forecasting ahead of the season through the QR strategy. Multi-Brand retailers (MBR) and Brand Marketers (BM) on the other hand show relatively lower performance levels indicating lesser control over the COGS. For MBR it indicates to the higher cost of the branded merchandise that has been bought, where in MBR model efficient merchandise buying is a key factor. BM's lowest sales value amongst other models is indicative of its lower gross profit results.

In Fig. 15 for EBIT, BR edges out LB in terms of its operating profit. This can be translated as a better control over the operating expenses by efficient utilisation of resources, such as inventories. In case of MBR and BM both these models yet again compromised on good returns on operating profit. Reasons can be higher overhead costs or higher amount of operating expenses in terms of inventory management, salaries, administration costs, etc. in combination to the lower Gross Profit.

GMROI a good tool to assess management performance for inventory management and an important metric for the fashion retailers in terms of selling their merchandise i.e., inventory. In Fig.16 BR is by far the most efficient model for inventory management as expected for fast fashion retailers. For LB lower GMROI indicates its vulnerability with higher level of stocks to go with lower rate of inventory turn. However MBR showing lower performance can be understood by the high value for the branded products that needs to be stocked. BM shows better GMROI instead of lower Gross Profit indicating good inventory turnovers.

From Fig. 17 BR with greater return on equity, showing efficient utilization of its resources & generating revenues for the shareholder's equity, however borrowing insights from the D/E ratio BR are financially leveraged, indicating the favourable use of leverage (debt). BM has poor ROE showing least profitable for the owners of investment.

Considering Fig 18, it can be justified that LB owns a higher mark-up value for its competence in a highly specialized designs and craftsmanship, whereas due to higher re-

sponsiveness to the consumers varying demands BR also have a relatively higher mark-up value than MBR or BM.

5.2 Liquidity Ratios

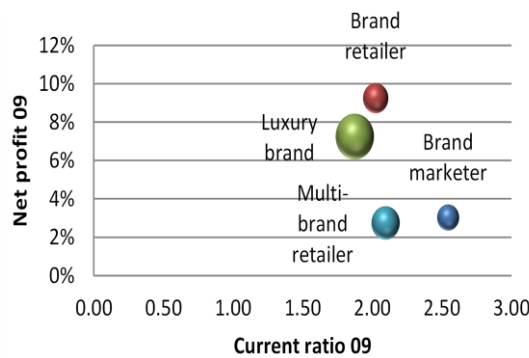


Figure 19. Net Profit Vs Current Ratio, 2009

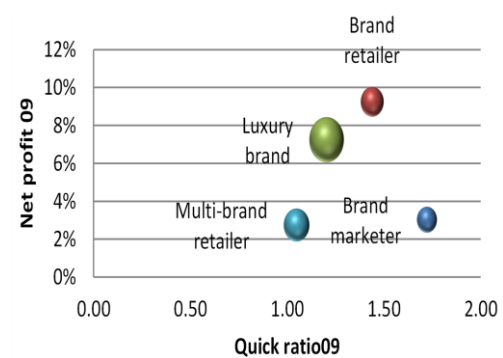


Figure 20. Net Profit Vs Quick Ratio, 2009

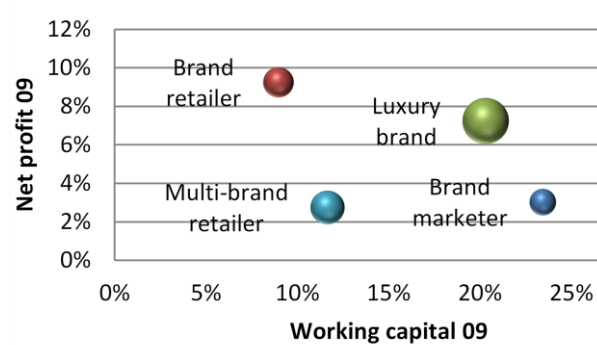


Figure 21. Net Profit Vs Working Capital (%), 2009

Current ratio is a metric for liquidity of a company. Considering Fig. 19, it can be seen that all the models are quite liquid and enjoy a healthy financial condition with BM showing much better financial health relative to other business models. However, in fashion retailing business too much of non-marketable inventory will show a better current ratio, which cannot be converted into cash easily to pay off its short term liabilities. Sometimes higher ratios are indicative of the fact that the companies are going to invest in new product or market. To have a better view of a company's financial health *Quick ratio* is employed which is more conservative in its application and eliminates inventory as the current asset. Now looking at the Fig 20, it can be concluded that MBR previously in better position in terms of current ratio is lagging behind which indicates the im-

part of non-marketable inventory in the current ratio performance. However the pattern is quite the same for other business models with a healthy ratio i.e. above 1.

Working capital/Net sales refer to the ratio between leftovers in net sales after the company has paid current liabilities from its current assets. From Fig. 21, we can see BM still dominating among the business models, justifying its lower liabilities. LB in comparison to previous two figures shows improvement in terms of its health, mainly due to the fact of higher sales value, although BR has shown better liquidity in above ratios but decline in its position indicates higher levels of current liabilities or financially leveraged.

5.3 Leveraging Ratios

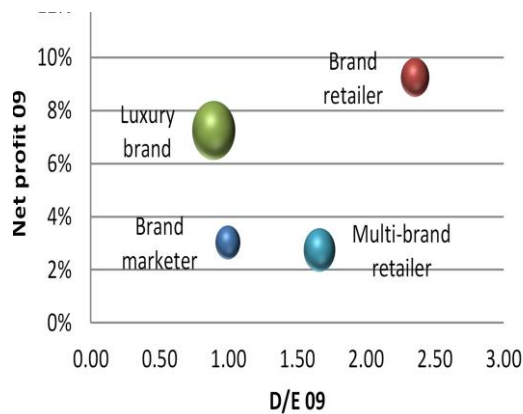


Figure 22. Net Profit Vs D/E, 2009

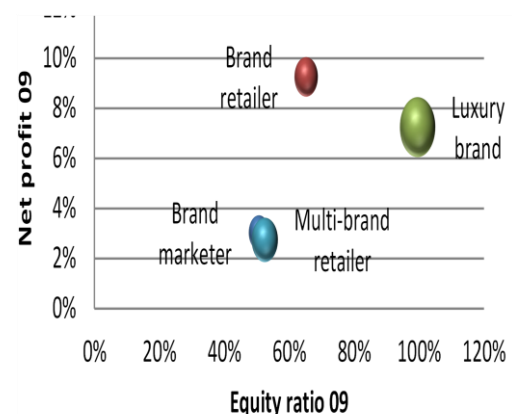


Figure 23. Net Profit Vs Equity Ratio, 2009

Leveraging ratio measures the extent of a company's debt. Asset to Equity ratio & Debt to Equity ratio indicates that how much of the company's asset are owned by the company and how much are leveraged or financed through the debt. Brand Retailers have shown their dependence on the debts to generate the desired cash flow given the breadth of their management of value networks. However, this fact makes them susceptible to the economic downturns, in which companies still have to pay off its debts irrespective of the sales performance. The Equity Ratio measures the proportion of the total assets that are financed by the share-holder, and not creditor. Fig. 23 shows higher Equity ratio by LB.

5.4 Efficiency Ratios

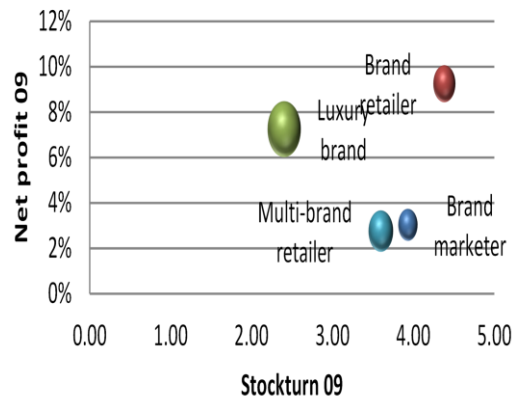


Figure 24. Net Profit Vs Stockturn, 2009

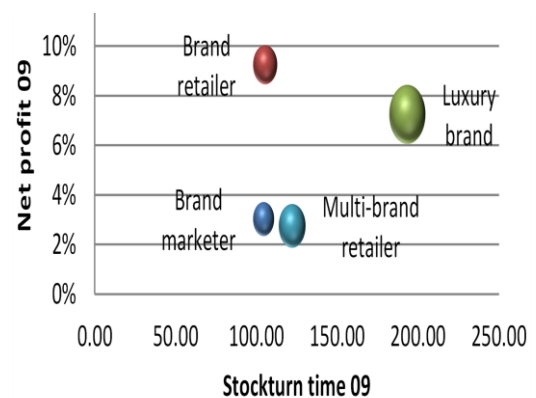


Figure 25. Net Profit Vs Stockturn Time, 2009

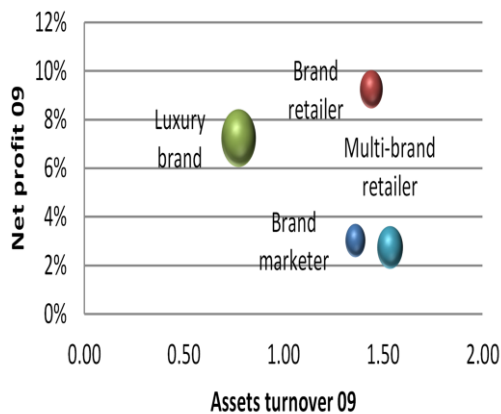


Figure 26. Net Profit Vs Asset Turnover, 2009

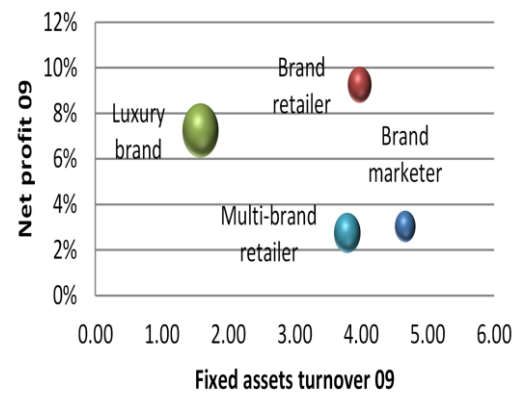


Figure 27. Net Profit Vs Fixed Asset Turnover, 2009

Asset turnover and fixed-asset turnover measure the efficiency how companies are utilizing their assets in generating sales. However, fixed assets are the non-current assets which are not directly sold to the end consumers. MBR in its utilization of assets shows good efficiency in generating sales. Asset turnover also indicates pricing strategy in a manner that companies with low profit margins tend to have high asset turnover in comparison with the companies with high profit margins. This is clearly shown in fig. 26 where MBR and BM showing low profit margin but better asset turnover in comparison to the LB which have high profit margins but lower asset turnover.

Fixed asset turnover indicates the sales using its fixed assets; in general, the higher the ratio the lesser amount of money is tied up in fixed assets for the generated sales, as

shown by BM. In case of LB lower ratio indicates the over investment of business in fixed assets.

Stock turn measures how many times the company's inventory is sold during the year. This is one important metric to evaluate the performance of fashion retailers. The higher the stock turn lesser the retailer is prone to Markdown, inventory cost, opportunity cost, etc. Although even higher stock turn can also mean fewer inventories which have its own cost in terms of lost sales, Customer service and reputation so it is imperative to keep a balanced inventory to effectively meet the supply and demand. BR, BM and BMR reinforce the above mentioned concept in Fig 24 whereas on the other extreme is LB whose stock turn is slow as the high value merchandise pose a greater financial risk if not utilized (sold), although potential for higher profit margin is greater for successful LB. *Stock Turn Time* is the average number of days it takes to sell the entire inventory one time. Fig. 25 shows that LB with lesser stock turn has a higher stock turn time and vice versa for other business models.

5.5 Fast Vs Traditional (Branded) Retailers

As can be seen from the above findings Branded retailers ensure maximum success in comparison to the other business models studied. It's imperative to understand the methodology adopted within this model, to delve deeper into this methodology branded retailers are further classified into Fast Fashion and Traditional Branded Retailers. Fast Fashion retailing encompasses two important components, complementing each other; Quick Response (short production & distribution lead times), & highly fashionable product design.

QR reduces the lead times through the combination of localised production and sophisticated Information Systems facilitating the inventory monitoring and replenishment, and expediting the distribution process. This is reflected in the strategy adopted by ZARA as it produces majority of its designed products in the costly European & North African factories instead of utilising less expensive Asian factories, through outsourcing. This enables ZARA in monitoring & replenishing the inventories to effectively match supply with demand. Together with responsiveness (*QR*), *highly fashionable product designs* helps retailers in embracing the holistic approach of fast fashion retailing. This

engages the firms to continuously assess the consumer trends & industry drivers. Benetton, for example, employs a network of trend spotters and designers throughout Europe and Asia (Meichtry 2007). [37]

The complementing attributes of these two components are critical to fast fashion, as with short production lead times the propensity of creating highly fashionable product design closer to the selling season increases, drastically. This impacts higher profitability through elimination of lost sales & influencing consumers purchasing behaviour allowing for greater selling price whereas, highly fashionable design ensures a more popular product and hence greater market share. In case of traditional branded retailers such as GAP, the average design and production lead times stretches from 6 to 12 months. Implying that, design decisions are taken well in advance of the selling season and would be unable to cater unexpected trends. Thus, affecting the lost sales, markdowns, and lower customer services which results in comparatively lower profitability. As evident from the bubble graphs below it is easier to figure out how fast fashion nature of this model, which is the fundamental aspect for fashion retailing, affects the performance in following domains: (Companies selection based from Appendix 3)

- Mark-ups
- Stock turn
- Fashion Risk
- Profitability performance

Mark-ups are higher as a result of a more enhanced designed product and as QR influence the dynamic sales price decision at the start of the selling season. Fast Fashion retailers are more capable of matching the supply to demand and thus accounting for higher inventory turnover i.e., stock turn. Stock turn is also aided through the frequent change in product assortment. Fashion risks are eliminated to its maximum by assessing the on-going trends in the industry and consumer preferences very close to the beginning of selling season. By avoiding the mismatch in supply and demand through QR and by creating the value through high in demand highly fashionable products, these retailers ensure the maximum utilization of its resources and reaping higher profit margins.

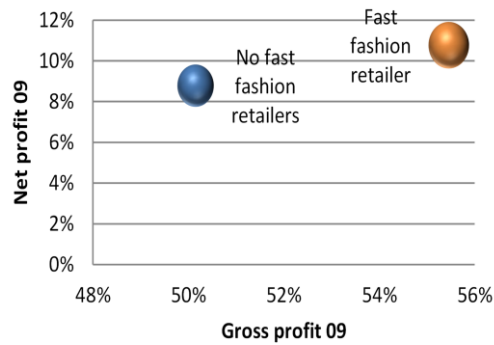


Figure 28. Gross Profit Vs Net Profit, 2009

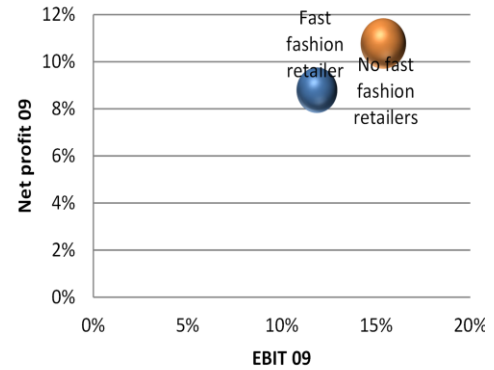


Figure 29. EBIT Vs Net Profit, 2009

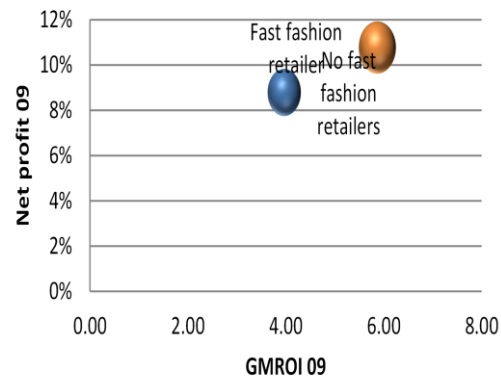


Figure 30. GMROI Vs Net Profit, 2009

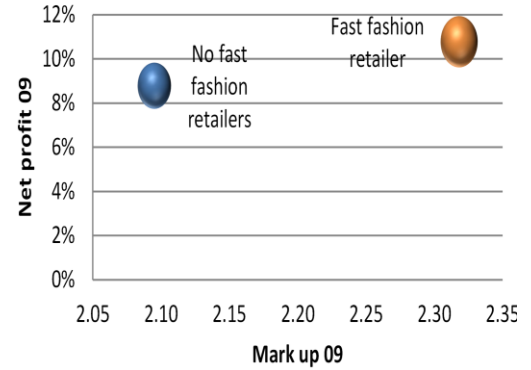


Figure 31. Mark-up Vs Net Profit, 2009

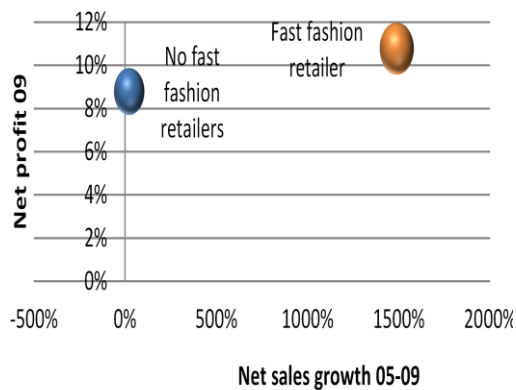


Figure 32. Net Sales growth (05-09) Vs Net Profit,

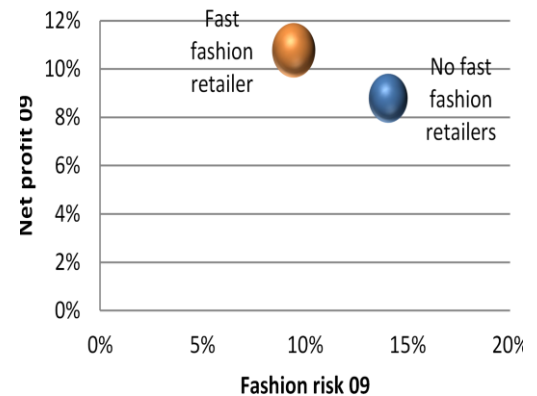


Figure 33. Fashion Risk Vs Net Profit, 2009

5.6 Retailers Vs Marketers

Retailing has gained superiority in present day fashion industry as it helps the companies to gain a better grasp of its resource from -upstream to the downstream - by coupling the buyers and suppliers interest and assuring better control throughout its value creation in the value chain. However, Brand Marketer, have shown a considerable success to be realised as one of the competitors to Retailers.

Meichtry (2007) points to the fact that companies (Marketers) in effort to adapt to the industry needs are trying to focus on the design and develop trendier products without revamping the production lead times, as they deem it challenging as well as complex in terms of logistics and culture (of a company) that can force them to drastically redesign their supply networks. [37]

However, in comparison to the Retailers – focusing on the designs as well as the shorter production lead times- Marketers face the challenge of losing its design's efficacy without the shorter production lead times. In case of Marketers, traditionally, production lead times extends to 6 months which can result in neutralising the impact of the enhanced design objectivity as marketers would still need to finalise the design well before the selling season. This can impact the performance of Marketers in terms of missing important and unexpected industry trends as well as customer preferences. Other factors arising can be higher inventory, lower stock turn, and mark-downs.

From the premise developed above the graphs can be concluded; Sales growth (Fig. 38) of the Retailers is on a sharp rise in contrast to the Marketers, reflecting the Retailers capability to adapt to changing trends and preferences and ensuring better performance. Higher mark-up values (Fig. 37) and lesser fashion risks (Fig. 39) are common attributes to the Retailers with a better control over the supply network and thus matching the supply with demands effectively. The factors where Retailers out-compete the Marketers as evident in the graphs are mentioned below: (Companies selection based from Appendix 2)

- Profitability
- Mark-up
- Sales Growth
- Fashion Risk

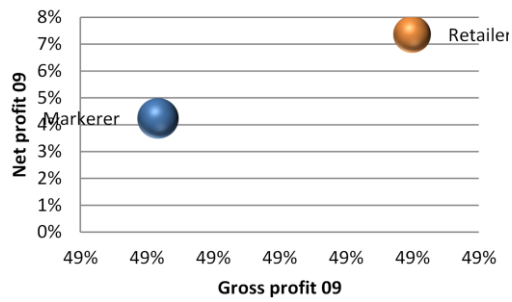


Figure 34. Gross Profit Vs Net Profit, 2009

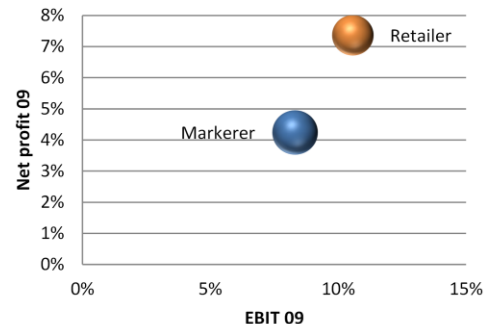


Figure 35. EBIT Vs Net Profit, 2009

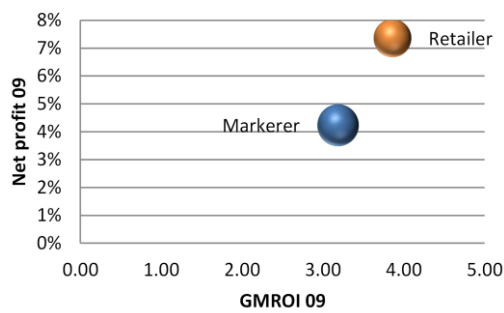


Figure 36. GMROI Vs Net Profit, 2009

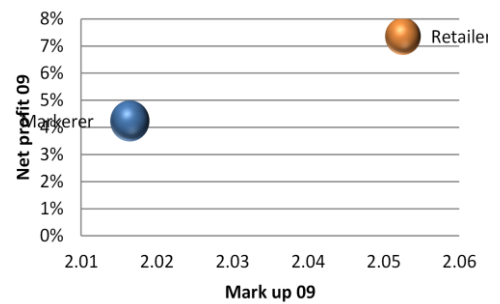


Figure 37. Mark-Up Vs Net Profit, 2009

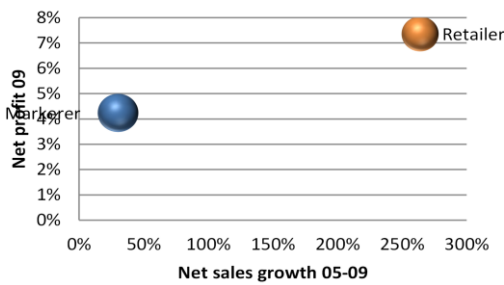


Figure 38. Net Sales Growth (05-09) Vs Net Profit,

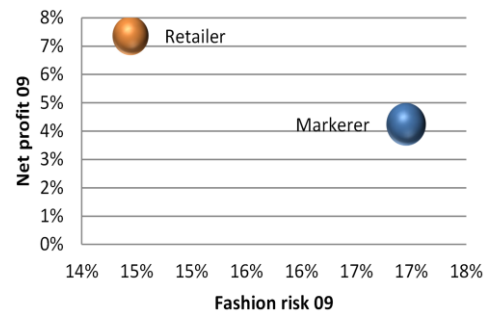


Figure 39. Fashion Risk Vs Net Profit, 2009

5.7 Data Analysis

The data analysis is carried out along 2 inferential statistical procedures as shown below:

Inferential Statistical Procedure 1

1. Calculate the μ_{marketer} (n: sample size = 20), $\mu_{\text{branded retailer}}$ (n: sample size = 17), $\mu_{\text{multi-brand retailer}}$ (n: sample size = 7), and $\mu_{\text{luxury brand}}$ (n: sample size = 8); for the net profit.
2. $H_0: \mu_{\text{marketer}} = \mu_{\text{branded retailer}} = \mu_{\text{multi-brand retailer}} = \mu_{\text{luxury brand}}$; H_1 : At least one mean is different
3. Run one-way ANOVA F-test (completely randomized design); Reject or accept H_0 Accept $H_0 \rightarrow$ Stop. Reject $H_0 \rightarrow$ continue to Step 5.
4. Run Tukey-Kramer test (Find the critical range $Q_{\alpha} = C$) [as the samples are not normalized]. Tells which population means are significantly different, e.g. $\mu_1 = \mu_2 \neq \mu_3$
5. Observed difference between μ 's $> C$, infer about the studied performance ratio (net profit-2009) of the groups (in comparison) Also run the Levene test (compare F_{Levene} to F_{ANOVA}) [as the samples do not have homogeneity of variance]
6. Reject or accept H_0 (infer whether there is sufficient evidence that the variances in the groups are different or not and what does it confer)

Inferential Statistical Procedure 2

1. Run correlation test between profitability ratios and efficiency-, leverage-, and liquidity- ratios (for retailers, marketers, multi-brand retailers, and luxury brands)

5.7.1 Results of the Inferential Statistics 1

At 95 % confidence level, if $F_{\text{STAT}} = 2.271459011$ is lesser than $F_{\alpha} = 2.798060648$, the null hypothesis cannot be rejected. This means that there is no significant difference in the mean net sales (2009) among the four groups of value chain players. Further analysis was stopped according to Step 4 in the above flowchart. But carrying out the same testing at 90 % confidence level, $F_{\text{STAT}} = 2.271459011$ is greater than $F_{\alpha} = 2.201591279$, so we reject the null hypothesis ($H_0: \mu_{\text{marketer}} = \mu_{\text{branded retailer}} = \mu_{\text{multi-brand retailer}} = \mu_{\text{luxury brand}}$). Further analysis was continued though a lower confidence interval suggests lower reliability on the survey results. A major factor determining the length of a confidence interval is the size of the sample used in the estimation procedure. As the number of companies involved in this research when divided into groups was not significantly high, such drawbacks are inevitable.

The result of the one-way ANOVA F test was to determine whether there is a difference in the net profit level (2009) among the four groups of players in the TC value chain. At 90% confidence interval this proved to be true. To determine which groups are significant in difference, the Tukey-Kramer multiple comparison procedure for one-way ANOVA was run (simultaneously make comparisons between all pairs of groups).

The results of the Tukey-Kramer test at $Q\alpha = 3.325$, $c = 4$, $df = 51$ and 90% CI yields that the mean net profit level is significantly different for the branded marketers and luxury brands while significant difference does not exist between other pairs of groups.

To test whether the variances in the 4 groups viz. retailers, marketers, multi-brand retailers, and luxury brands are equal or not (as the sample size of each group is different) and thus to check the homogeneity of variance the Levene test was run considering the new $H_0 = \sigma^2_{\text{marketer}} = \sigma^2_{\text{branded retailer}} = \sigma^2_{\text{multi-brand retailer}} = \sigma^2_{\text{luxury brand}}$ against the alternative hypothesis: $H_1 = \text{Not all the } \sigma^2 \text{ are equal}$. We observe that the $F_{\text{Levene}} = 1.878$ is lesser than the $F_{\text{ANOVA}} = 2.201$, which suggests that we do not reject H_0 (there is no evidence of significant difference among the variances in the 4 groups). Thus it is reasonable to assume that there is homogeneity-of-variance in the net profit of the group members, thus justifying the choice of ANOVA F-test.

5.7.2 Results of the Correlation Analysis

Correlation analysis generates the following trends as mentioned below:

- EBIT to Net Profit –are strongly correlated, marking the importance of operating expenses to the bottom line (Net Profit).
- Mark-Up to Gross Profit – strong correlation, justifying the greater returns for higher mark-up value.
- Asset Turnover to Fixed Asset Turnover –shows correlation, singling out fixed assets as an important measure towards asset turnover.
- Debt/Asset to Debt/Equity –shows correlated strongly with the exception of BM.
- GMROI to Net Profit –shows weak correlation

- Stockturn to Net Profit –shows *Curvilinear Relationship*² implying, with increasing Stockturn Net Profit increases to a certain point and further increase decreases the Net Profit.

5.8 Discussion and Analysis

Brand Retailers turn out to be the best at addressing most of the discussed success factors. This model exercises the firm control over Supply chain competences catering supply in a cost effective manner and being profitable, demand is managed responsively with factors such as postponement, information visibility is higher throughout the supply chain and by adding value to the product & design development harnessing all aforementioned competencies. They are differentiated in terms of fashion forwardness with greater scope of integration between buyer & supplier network management and in turn gaining competitive leverages & are affecting a remarkable increase in sales growth (05-09) as a business model. This emphasises the importance of agility and value creation by addressing the customers demand aggressively, driven by higher mark-up, better profitability success and lesser fashion risks.

Multi Brand Retailer have shown that their business model is least profitable, even though they are exhibiting the higher value for the net sales but the profitability indicators are on the lower side indicating relatively lower level of value creation inputs, lose control over the Supply chain competencies, thus affecting operating expenses: inventory turnover can be a reason, tying up higher cost of the branded goods in inventory. Also the sales growth rate for this retailing model has been at par with BM & LB; considering, highest by BR.

Branded Marketers have shown good liquidity relatively, indicating good cash flow through better performance in its asset management. Instead of higher value creation and enhanced brand equity for these retail models they are more traditional than fast fashion forwarded. This impacts the Supply chain competences losing control over the success factors.

² Curvilinear Relationships doesn't follow the straight line, they are related but not linearly.

Luxury Brands are similar to Marketers in aspects of slow production (higher productions lead times). With the magnitude of value creation highest in all the competing brands, through higher craftsmanship and premium designs, it allows the brand equity to insulate them from competing retailers affecting increasing sales and higher profitability, generally, characterised by the specificity towards specific market or customer segment. Thus, resulting in lesser leverages gained through the success factors driving the fashion industry.

Classifying the branded retailers into fast fashion & traditional branded retailer domain resulted in remarkably better outcomes in terms of; profitability, Mark-up, Fashion risk & sales growth. However it is worth noting that almost similar trends were generated from the comparison of marketers & retailers implying the successful impact of fast fashion nature of retailers against the traditional fashion retailing for marketers.

Taking into account the *Correlation Stats* two main trends can be implemented and understood in scenarios: EBIT strongly correlated to Net profit Margin and Mark-up strongly correlated to higher Gross Profit Margin. In this scenario it is important to understand that most of these retailer models account for inventory as their major operating expenses, affecting their EBIT and in case of Mark-up the brand identity, design differentiation and responsive nature of the model contributes towards the higher percentage of Mark-up and thus into higher profit margins. Branded retailers and Luxury brands retailers have gained solid grounds in these particular domains with higher profit margins achieved. Both exhibiting higher mark-up rates based on the differentiation typified according to the individual models, however, In case of EBIT Branded Retailers outperforms the Luxury Brand Retailer with much better inventory turnover.

On inspecting the correlation between GMROI to Net Profit, it shows weak linearity although increases slightly for GM showing a causal relationship to a certain extent. Whereas, in correlation between Stockturn to Net Profit the coefficient value suggests that linearity almost doesn't exist, making room for the assumption that the Curvilinear Relationship may exist. As it makes sense, when Stockturn increases Net Profit increases as well but after a certain level increase in Stockturn would impact the Net Profit negatively. Other justification for this notable anomaly may reside in the factors as lost sales can't be measured and non-linear inventory cost function brought about by logis-

tics decisions (information & material flow, large volumes & disparate types of data, and multiple organization and entities) influences the use of inventory related costs harder to track and make sense, easily.

The performance measures (financial ratios) calculated from the data collected from the financial statements, are used to compare the strengths and weaknesses between various models of companies employed, as they help in quantifying the different aspects of the business in order to analyse the performance. Retail Performance measure (ratios) were not utilised in this study, as for most of these metrics it is not possible to quantify the results through financial statements. This data analysis helps in concluding that each business model studied has shown certain degree of reliability onto the factors such as inventory management, Mark-up, higher degree of cash flow, stricter control over operating expenses. These financial modelling trends are tabled in appendix 4.

5.9 Limitations and Future Research

This study entailed many challenges due to the fact that performance measure is not as easy to achieve as in other business domains. To cater to these shortcomings a methodology was derived and focused on the financial indicators (performance metrics) to gauge the trends and understand the success factors in that pretext.

Research in this particular field has been limited, where the success factors can be measured to their impacts onto the business domain directly. Financial data is easier to quantify or compare the success of the particular business model but it carries certain risk, where the trends have to be guessed. As the impact of these financial metrics is correlated by many inter-related factors which are most of the times difficult to isolate & analyse.

Also in this study Sustainability is defined as one of the success factors that impacts the perception of the consumer directly and directs the business players to attend to it but on systematic basis it's not possible to measure the sustainability. Also the financial information considers consolidated business activities which make it hard to separate the non-fashion or apparel domain to classify, as it did occur in the case of Luxury Brands

whose financial information takes into account of several domains in their business organization and may have impacted the trends identified.

In future, it is imperative to work out solid performance metrics which can be looked for the direct impact on an individual business activity. It may require a certain framework or a model where depending upon the different variables involved in the fashion industry it can be possible to assess the performances. Factors such as customer services, lost sales and opportunity costs must be rationalised in order to inspect the exact levels of optimization. Supply chain competences & related metrics can be drawn forward as conventional benchmarks for the industry players to look up to when analysing the level of growth or penetration they have achieved or want to achieve.

6 CONCLUSION

After evaluating the performance of each business model according to the designated success metrics (financial ratios), it can be concluded that Brand Retailers were by far the most consistent business model. Although other business models showed its effectiveness for different metrics such as Brand Marketer displayed higher liquidity ratios, Luxury Brand showed lesser dependency on debts in the Leveraging ratio, good profitability ratios, but really was not consistent in comparison to the Brand retailers in the aspect of inventory turnover. Multi Brand retailers have been outweighed by all other models utilised in this study, justifying the shift to a more value added remodelling.

Throughout this study the critical factors affecting the performances in each business model were related to the Mark-up value and efficient utilisation of resources. Based on the discussion and analysis it can be safely interpreted that these factors are governed through the Supply chain management competencies; the success factor. Demand fulfilment is not all about forecasting demand but in genuine it's the flexibility & visibility in the value network (supply chain) that harnesses agility & responsiveness, and helps in achieving the demand.

This analysis illuminates the importance of value networks. Hence companies can no longer compete as individual entities because the competition has moved between networks. The whole value network should be agile, fast and transparent. The companies focused towards the value creation throughout its network and moves forward in an integrated manner are more likely to gain competencies in Value (supply) chain. To conclude it can be said that in fashion retailing where the trends are volatile, with increasing customer demand and awareness, and serious competition among the competitors, retailers are required to adapt to these situations and from analysis the business model who exhibit the most control in the factors such as forecasting, supplier buyer relationship management and SCM competencies, optimally, are Brand Retailers.

7 REFERENCES

1. Paola, H. & Mueller, C. (1980) *Marketing, Today's Fashion*, Prentice-Hall.
2. Easey, M. (2009) *Fashion Marketing*, third edition, Wiley-Blackwell.
3. Christopher, Lowson, R. & Peck, H. (2004) *Creating agile supply chains in the fashion industry*, International Journal of productivity and performance management, Vol. 58 No. 8, Emerald Group Publishing Limited.
4. Kang, J. & Park-Poaps, H. (2010) *Hedonic and utilitarian shopping motivations of fashion leadership*, Journal of Fashion Marketing, Vol.14 No.2, Emerald Group Publishing Limited.
5. Cholatpinyo, I. Padgett, & Crocker, A. (2002) *Conceptual model of fashion process-Part 1*, Journal of Fashion Marketing, Vol.6 No.1, Emerald Group Publishing Limited.
6. Hayes, S. & Jones, N. (2006) *Fast fashion: a financial snapshot*, Journal of Fashion Marketing, Vol.10 No.3, Emerald Group Publishing Limited.
7. Azuma, N. & Fernie, J. (2003) *Fashion in the globalised world and the role of virtual networks in intrinsic fashion design*, Journal of Fashion Marketing, Vol. 7 No.4, Emerald Group Publishing Limited.
8. Bruce, M. & Daly, L. (2006) *Buyer behaviour for fast fashion*, Journal of Fashion Marketing, Vol. 10 No.3, Emerald Group Publishing Limited.
9. Mattila, H. (1999) *Merchandising Strategies and Retail Performance for Seasonal Fashion Products*.
10. Lamey, J. (1996) *Supply Chain Management*, Publisher: Financial times.
11. Hines, T. (2004) *Supply Chain Demand customer driven and customer focused*. Publisher: Butterworth-Heinemann.
12. Mattila, H. (2009) *Course Handbook for Sourcing and Purchase management*.

13. Jacobs, D. (2006) *The Promise of Demand Chain Management*, Journal of Fashion Marketing & Management, Vol. 10, pp. 84-96, Emerald Group Publishing Limited.
14. Tyler, D. & Bhamra, T. (2006) *Supply chain influence on new product development in fashion clothing*, Journal of Fashion Marketing, Vol. 10 No. 3, Emerald Group Publishing Limited.
15. Davis, D. & Mentzer, J. (2007) *Organizational factors in Sales Forecasting Management*, Journal of Forecasting, Vol. 23 No. 3, Emerald Group Publishing Limited.
16. Mahmoud, E. et al. (1992) *Bridging the gap between theory and practise in forecasting*, Journal of Forecasting, Vol. 8, Emerald Group Publishing Limited.
17. Goworek, H. (2011) *Social and environmental sustainability in the clothing industry: a case study of a fair trade retailer*, Social Responsibility Journal, Vol. 7 No. 1, Emerald Group Publishing Limited.
18. Barnes, L. & Greenwood, G. (2006) *Fast fashioning the supply chain: shaping the research agenda*, Journal of Fashion Marketing and Management, Vol. 10 No. 3, Emerald Group Publishing Limited.
19. Jones, P. & Comfort, D. (2007) *Corporate Social Responsibility: a case study of top ten global retailers*, Euro-Med Journal of Business, Vol. 2 No. 1. Emerald Group publishing limited.
20. Lichiello, P (2002) *Guide Book for Performance Measurement*, Turning Point Publications.
21. Choo, H., Jung, J. & Chung, I. (2009) *Buyer, Supplier relationships in Dongdaemun Fashion Market: Relationship Quality Model*, International Journal of Fashion Marketing & Management, Vol 13. No. 4, Emerald Group Publishing Limited.
22. Zadek, S. (2004) *The path to corporate social responsibility, Case Nike*.
23. Pramatar, K. & Miliotis, P. (2008) *The impact of collaborative store ordering on shelf availability*, International Journal of Supply Chain Management, Vol. 13 No. 1, Emerald Group Publishing Limited.
24. Kuisma, M. (2009) *Sustainable Product Design & Management*, Helsinki School of Economics.
25. Iyly, J. (2009) *Knowing Your Numbers*.

26. Ghemawat, P. & Nueno, J. (2003) *Zara: Fast Fashion*, Harvard Business School.
27. Dhorte, M. (2008) *Channel Management & Retail Marketing*, 2nd Edition.
28. Chaudhry, H. & Hodge, G. (2012) *Postponement & supply chain structure: cases from the textile and apparel industry*, Journal of Fashion Marketing & Management, Vol. 16 No. 1, Emerald Group Publishing Limited.
29. Ellinger, A. et al. (2010) *The influence of Supply chain management Competency on Customer Satisfaction & Shareholder Value*, Supply Chain Management: An international Journal, Vol. 17, Emerald Group Publishing Limited.
30. Butner, K. (2010) *The Smarter Supply chain of the future*, Strategy & Leadership, Vol. 38 NO. 1, Emerald Group Publishing Limited.
31. Azevedo, S. (2012) *Contribution of RFID technology to better management of fashion supply chains*, International Journal of Retail & Distribution Management, Vol. 40, No. 2, Emerald Publishing Limited.
32. Parrish, E. (2010) *Retailer's use of niche marketing in product development*, journal of Fashion Marketing & Management, Vol. 14, pp.546-561, Emerald Group Publishing Limited.
33. Redfern, R. & Davey, L. (2003) *Supply chain market orientation in new product development in the UK*, Journal of fashion marketing & management, Vol 7, No. 1, Emerald Group Publishing Limited.
34. Dove, R. (2001) *Response Ability: The language, structure & culture of agile enterprise*, Wiley, New York, NY.
35. Awad, H. & Nassar, M. (2010) *Supply chain integration: Definition & Challenges*, IMECS, Vol. 1.
36. Pretious, M. & Love, M. (2006) *Sourcing Ethics and the Global Market, case study of UK retail clothing sector*, International journal of Retail & Distribution Management, Vol. 34 No. 12, Emerald Group Publishing Limited.
37. Cachon, G. & Swinney, R. (2011), *The value of Fast Fashion: Quick Response, Enhanced Design, and Strategic Consumer Behavior*, Management Science Vol. 57, No. 4.

Appendix 1- Roles of Product Categories

Retail Brand Enforcer	<ul style="list-style-type: none"> • New Categories • High Fashion & symbolic Categories • Strong supplier & retailer brands • Create excitement & show in store
Cash Flow Contributor	<ul style="list-style-type: none"> • Established Categories • Non-symbolic categories • Consistent value provision
Profit Generator	<ul style="list-style-type: none"> • Growing Categories • Fashion Categories • Symbolic Categories • High Profit Margins
Service Provider	<ul style="list-style-type: none"> • Declining Categories • Staple Product Categories • Market leading Brands • Competitive with other Category Providers
Destination	<ul style="list-style-type: none"> • Growing categories • Leading Brands • Deep & wide assortment • Best retail offer by target customers

Appendix 1. Different roles of product categories. [12]

Appendix 2

	Design	Branding	Manufacturing	Retailing
Brand Marketers	<i>Fully</i>	<i>Fully</i>	<i>Partly</i>	<i>Partly</i>
Brand Retailers	<i>Fully</i>	<i>Fully</i>	-	<i>Fully</i>
Luxury Brands	<i>Fully</i>	<i>Fully</i>	-	<i>Partly</i>
Multi-Brand Retailers	<i>Partly</i>	<i>Partly</i>	-	<i>Fully</i>

Appendix 2, Ownership of business processes by companies in different categories.

Appendix 3- Selected Companies

	Company name	Country	Public	Category		Company name	Country	Public	Category
1	Adidas AG	Germany	yes	Brand marketer	27	Levi Strauss & Co	USA	no	Brand marketer
2	J. Barbour & Sons Ltd.	UK	no	Brand marketer	28	L-Fashion Group	Finland	no	Brand marketer
3	Belk Inc.	USA	no	Multi-brand retailer	29	Limited Brands	USA	yes	Brand retailer
4	Benetton Group S.p.A.	Italy	yes	Brand retailer	30	Liz Claiborne Inc	USA	yes	Brand marketer
5	Bestseller A.S.	Denmark	no	Brand retailer	31	LVMH-Gruppe Clothing	France	yes	Luxury brand
6	Burberry Group plc.	UK	yes	Luxury brand	32	Mango Mng Holding, S.L.	Spain	no	Brand retailer
7	Charming Shoppes Inc	USA	yes	Multi-brand retailer	33	Max Mara Fashion	Italy	no	Brand marketer
8	Christian Dior	France	yes	Luxury brand	34	Next Plc	UK	yes	Brand retailer
9	Columbia Sportswear Co.	USA	yes	Brand marketer	35	Nike Inc	USA	yes	Brand marketer
10	Esprit Holdings	China	yes	Brand retailer	36	Nordstrom Inc.	USA	yes	Multi-brand retailer
11	Etam	France	yes	Brand retailer	37	Oxford Industries	USA	yes	Brand marketer
12	French Connection Group	UK	yes	Brand retailer	38	Phillips-Van Heusen	USA	yes	Brand marketer
13	Gap Inc	USA	yes	Brand retailer	39	Polo Ralph Lauren Corp.	USA	yes	Luxury brand
14	Gerry Weber International AG	Germany	yes	Brand marketer	40	PPR Group	Italy	yes	Luxury brand
15	Gina Tricot A.B.	Sweden	no	Brand retailer	41	Prada Group	Italy	yes	Luxury brand
16	Giorgio Armani S.p.A.	Italy	no	Luxury brand	42	Puma	Germany	yes	Brand marketer
17	Gruppo Coin S.p.A.	Italy	yes	Multi-brand retailer	43	Quicksilver Inc.	USA	yes	Brand marketer
18	Guess Inc	USA	yes	Brand marketer	44	Saks Incorporated	USA	yes	Multi-brand retailer
19	Hennes & Mauritz A.B.	Sweden	yes	Brand retailer	45	Stefanel S.p.A.	Italy	no	Brand retailer
20	Hanesbrands Inc.	USA	yes	Brand marketer	46	Ted Baker	UK	no	Multi-brand retailer
21	Hermes International, S.A.	France	yes	Luxury brand	47	TJX Companies Inc.	USA	yes	Multi-brand retailer
22	Hugo Boss AG	Germany	yes	Brand marketer	48	Tom Taylor	Germany	yes	Brand marketer
23	IC Company AS	Denmark	yes	Brand retailer	49	Triumph Int.	Germany	no	Brand marketer
24	Industria del Dise'no Textil, SA	Spain	yes	Brand retailer	50	Urban Outfitters Inc.	USA	yes	Brand retailer
25	Jones Apparel Group Inc.	USA	yes	Brand marketer	51	Warnaco Group-Clothing	USA	yes	Brand marketer
26	KappAhl	Sweden	yes	Brand retailer	52	Varner-Gruppen AS	Norway	no	Brand retailer

3

Table. Selected companies (source: the webpages of companies)

³ Red Tabs are to distinguish the Marketers (Brand Marketer & Luxury Brand) from Retailers (Brand Retailer & Multi-brand Retailers), which are either in white or yellow tabs. Yellow tabs distinguish Fast Fashion Retailers from No Fast Fashion Retailers (white Tabs).

Appendix 4 - Financial Modeling

Brand Retailers	Weaknesses: <ul style="list-style-type: none"> • Higher Debt to Equity • More susceptible to economic downturn.
Strengths: <ul style="list-style-type: none"> • High Mark-up • High profitability • High Stock-turns • Higher Net sales growth (05-09) 	
Luxury Brand Retailers	Weaknesses: <ul style="list-style-type: none"> • Low Stock-turn • Low GMROI • Higher Fashion risk • Relatively lesser Asset turnover
Strengths: <ul style="list-style-type: none"> • High Mark-up • High Profitability 	
Brand Marketers	Weaknesses: <ul style="list-style-type: none"> • Lower Profitability ratios • Relatively lower mark-up
Strengths: <ul style="list-style-type: none"> • Higher Liquidity • High Stock Turnover • High Fixed Asset turnover 	
Multi-Brand Retailers	Weaknesses: <ul style="list-style-type: none"> • Low Profitability • Low GMROI • Higher Fashion Risks
Strengths: <ul style="list-style-type: none"> • High net sales • High asset turnover 	

⁴ Note: All these Strengths and Weaknesses are in relative comparisons to each of the business models studies in this research.